

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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RICHARD H. EDMONDS,
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BALTIMORE, APRIL 5, 1895.

THE Young Men's Business League of Charleston, S. C., which is assisting the growth of the city in various ways, is now agitating the building of packing-houses for fruits and vegetables raised in Carolina. This is the kind of work that counts.

As an indication of the desire of Northern manufacturers to establish industries in the South, the Birmingham (Ala.) Commercial Club announces that a manufacturer of chenille cloth and a plant for making plumbers' supplies may move to that city.

THE MANUFACTURERS' RECORD is glad to note that most of the Southern papers are continuing to warn farmers against planting too much cotton, but while they should "keep at it" in this respect, they should as strongly urge more diversity in crops.

IF the South really is going to build cotton mills, it will have to come to the North for a large share of its machinery and supplies, and we may be graciously allowed to get a little good out of it—New Bedford Standard.

Why, certainly. And if you will invest your money in good Southern enterprises, you will be able to make sufficient gains to counterbalance your heavy Western farm mortgage losses, and also your small losses in Atchison, Topeka & Santa Fe and a few other roads that New England boomed while discrediting the South.

Deserved More Space.

The interest in the Nicaragua Canal developed in Southwest Virginia is shown by the following editorial in the Staunton News:

We looked forward yesterday with pleasurable anticipations to the reading in the Norfolk morning papers a full report of Admiral Ammen's talk the evening before to the business men on the Nicaragua Canal. He is the father of the project, and we naturally expected to find in those papers, all of which favor the canal, an account that should have meat in it. One of the papers gives us an inch and a quarter and the other two about six inches each, all merely complimentary in its character. Our friends disappointed us in this. If Admiral Ammen will come over here and lecture on the canal we will guarantee to give him two to four columns and get in every fact stated by him, so that he can read it in print the next morning.

Valuable Lesson to the South.

In a recent issue of the New York Sun Mr. Hiram S. Maxim, the American mechanic, who has achieved a world-wide reputation for his inventions, among them the Maxim gun, and who is now directing extensive industrial enterprises in Europe, gives his views in detail in an article, the main purport of which is to show that England is steadily losing her supremacy as a manufacturing nation, and to assign some of the chief reasons for this decadence. This article, embodying the matured opinions of a man who has had rare opportunities for observation and who sees everything from a practical standpoint, contains much valuable instruction for United States manufacturers and their employes, and will interest especially those throughout the North who are many times perplexed and annoyed by the labor organizations that comprise within their membership a very large percentage of the working forces of the country engaged in other than agricultural pursuits. The following synopsis of Mr. Maxim's article gives its most important features.

The immense wealth of Great Britain, which is both the richest of all nations and the richest nation that has ever existed, is the accumulation of the profits of centuries, during which time Great Britain has made herself the chief manufacturing and the principal commercial and banking country of the world. Having this vast wealth, she is continuously employed in seeking places for its profitable investment. Go to any part of the globe, and wherever you find a place in which capital can be safely and profitably employed there you will find an Englishman looking for the opportunity. In Spain British capital is invested in tramways, gas and water works, and, to some extent, in mining. There are very large amounts of British money invested in enterprises in Turkey, Austria, Italy and Russia, and immense sums in the United States are employed in various established enterprises, including numerous well-known and most successful concerns which have been purchased by British capitalists and converted into limited liability companies. These foreign investments have been made because larger profits can be made abroad than in Great Britain, and, in all kinds of business that give employment to great numbers of men, it has been practically demonstrated that, all things considered, the average of profits is greatly on the side of the foreign rather than of the enterprises located anywhere in the United Kingdom.

There was a time when Great Britain was supreme as the manufacturing country of the world. She sent her ships everywhere to carry her goods to the nations, and to bring back their raw ma-

terials to work up in her factories, or to bring back food for the sustenance of her workers. She built ships for herself and for other countries. Germany and France once went to the yards on the Thames for all their first-class ships, but now each builds her own. She was the merchant and the banker of the nations, handling and exchanging the products of all countries, and deriving profits from all her transactions. But a change has taken place. Her importance as a manufacturing country is waning. The first step in her decline as a manufacturing nation was taken when the trades unions began to assert themselves and to dictate to their employers. Another cause of her decline was the slowness of the British manufacturer to adopt improved machinery, tools and methods. The reply of a manufacturer of lathes to Mr. Maxim's question—why he did not make better, more modern tools—illustrates this: "Oh, everybody knows that everything of English make is very much better than anything made abroad."

This self-satisfied belief in the superiority of British-made goods has cost the loss of a great deal of trade. Half a century ago an American mechanic who needed a first-class cutting tool of any kind insisted upon buying one of British manufacture. Now American tools are so superior that they are almost exclusively used at home, and are in such demand by the more skillful British mechanics that they are exported largely to England. It was a fact that when the American duty on steel was 40 per cent, United States manufacturers of twist drills and other small tools imported it, made it up, sent their goods to England and sold them at prices less than the actual cost of inferior goods to British manufacturers.

The trades unions' contribution to the loss of supremacy as a manufacturing nation is due to the restraints they impose upon their employers. In other countries, like France, Germany and the United States, one man will operate from four to six of the automatic lathes, planers and milling machines used in machine shops. The trades unions will not permit a British workman to attend to more than one. In a foreign shop, running at the same rate of speed as the British, one man will do four or six times the daily work of the English workman. The latter sees only that, by the foreign plan, one man throws three or perhaps five others out of a job, and so he won't have it. This idea runs through the entire manufacturing system. According to Mr. Maxim, through this, British manufacturers have lost the making of many goods they once monopolized, not only of tools and hardware, but in various textiles. Machine-made lace, once made solely in England, is now more largely produced in France, which has taken away

the entire manufacture and supply of a class of printed-linen goods with which England once supplied Cuba, Mexico and the South American States. Germany makes all the crape England formerly produced, and now supplies what that country requires, and she has also taken away a large percentage of England's export wire trade. A long list might be added to show the extent and variety of the transfers of manufactures from Great Britain to other countries.

Southern chambers of commerce, boards of trade, municipal and other organized bodies, to which such work properly belongs, may find it profitable to consider the facts presented by Mr. Maxim and act upon the suggestions that naturally arise from them. These are:

1. That an immense amount of British capital is continually seeking opportunity for profitable investment. This, on the principle concisely stated by Congressman Walker, that "the value of capital is destroyed when hoarded. Every effort is made by capitalists to invest their capital, and they only fail to do so through timidity."
2. The British capitalist has learned by experience that judicious investments abroad pay better in the long run than when made in home enterprises.
3. That he has been taught by experience that where there are no labor organizations like those that are destroying British manufactures, the chances for safe and profitable investments are the best.
4. That the South has in it all the opportunities and advantages such capitalists are seeking, and is entirely free from the evil influences that are impairing British manufacturing interests.

5. That a calm, truthful and logical presentation of the South's advantages over all other sections of the globe on lines suggested by Mr. Maxim's statements would interest both Northern and foreign capitalists, and induce very many to visit the South with the view of making large investments, if upon personal investigation they became convinced that the presentation of advantages was absolutely true.

The MANUFACTURERS' RECORD commends the statements of Mr. Maxim and the suggestions arising from them to the thoughtful consideration of all who are endeavoring to advance the South's prosperity by developing its natural resources, increasing the number, the variety and the magnitude of its industries, or by adding largely to the numbers of its intelligent and enterprising agriculturists. The time is ripe for such an effort. The organizations exist that can make it as it should be made. The sole needs are the will and the enterprise. Shall these be found wanting?

Self-Help.

One of the most striking phases of the present industrial movement in the South is the disposition shown by everybody to do their part in this work. "Self-help" is the cry of the day in the South. Commenting on this the Charleston News and Courier says:

Two dispatches printed yesterday announced that two new and important, if small, enterprises have been fairly organized in the State within the past week, after only a few days' work in each case by their promoters.

One is the knitting mill at Cheraw, for which the capital stock of \$10,000 has been subscribed in full, and it is announced that the company will equip the mill at once with only the latest improved machinery, and that it will be operated under the direction of a superintendent who comes from one of the most successful mills in the country.

The other enterprise is a canning factory for Camden. Acting on a suggestion in the News and Courier a few days ago, it is stated, Mr. E. C. Zemp went to work immediately, assisted by several other enterprising citizens, and in a short while enough money was subscribed to make the little factory a certainty, a suitable building having been obtained. Camden and Cheraw, therefore, have two more industries assured than they had a week ago, which will give needed employment to a considerable number of people, will bring into their respective communities thousands of dollars to help trade and business of all kinds, and undoubtedly will induce the founding of still other new enterprises later.

It was a good week's work for both towns. It was a step in advance for both, and there is not a citizen of either, we are sure, who does not feel more confidence in their future prosperity for their having taken it. Other towns which are waiting for strangers to come and help them to build "a big factory" would do well to give the Camden and Cheraw plan a trial. It will accomplish the most and the best results in the long run.

The South Needs a Textile School.

The MANUFACTURERS' RECORD cannot too strongly commend the establishment of a school in the South where the boys and young men can be instructed in the finer branches of textile work. Although New England is supposed to have operatives who can successfully finish the most delicate cotton and woolen fabrics produced in this country, the manufacturers feel that the standard must be raised even higher, and are making every effort to have the Massachusetts legislature appropriate \$100,000 for the proposed textile school. The same arguments they make apply equally as well to the South. Such an institution would fit thousands of young men for a permanent and profitable employment who now are barely earning a livelihood as clerks and in other branches of work which are already overcrowded. But this is only one benefit. The graduates of such a school will give the South a reputation second to none in the world for the quality of its mill products, and through its instruction textile workers can secure in a few years a proficiency which would take them ten times as long to learn in the ordinary routine of factory life.

Immigration a Vital Necessity.

Capt. Hugh R. Garden, who has given such close study to all questions pertaining to the best interests of America, and especially to the South, in a brief letter published in this week's issue presents as strongly as it has ever been put the South's need of immigration. In a few brief sentences he shows how it has become the duty of every man in the South, the duty to his country and to the rising generation, to do all in his power to bring outside people to that section. This is a great subject and reaches far beyond the mere immediate

financial results that may come to the South and to the Southern people from immigration. It is more than that. It is a possible means of solving many of the vexing problems that confront our country.

Convention City of the South.

The popularity of Atlanta as a convention city is familiar to the readers of the MANUFACTURERS' RECORD. The people of Atlanta appreciate the money spent by the large floating population created by such gatherings, also the amount of free advertising the city receives from such visitors on their return to their respective States; consequently every inducement possible is held out to organizations of every character to gather at Georgia's metropolis. Just to show the success attending these efforts, it may be stated that within the next year the following organizations will meet there: Order of Railway Conductors, State Knights of Pythias, Washington newspaper correspondents (who will advertise the exposition), Road Parliament, comprising several thousand delegates; Irrigation Congress, Farmers' National Congress, Laundrymen's Convention, International Firemen's Tournament, Congress of Religions and National Bankers' Association. Most of the gatherings are called for dates before January 1, 1896, and a number of them will be attended by representatives from every State in the Union.

Georgia Manufacturers Organizing.

The manufacturers of Georgia have determined to form an association for mutual benefit, and will meet for that purpose at Atlanta on May 14 and 15. The organization will include all branches of manufacturing, and the MANUFACTURERS' RECORD believes that it can accomplish much good not only in fostering industries now existing, but in stimulating the promotion of new enterprises. It can prevent the enactment of laws injurious to its interests; it can regulate transportation rates, and, above all, it will give industrial interests in the South more prestige and influence throughout the country, and cause this section to be regarded of more importance as a location of mills and workshops. While it is a good thing to form this State association, a combination of all the manufacturers in the South would have a much greater influence.

Rapid Building in a Southern Town.

A brick famine is on. There are no brick in Charlotte. Each of the makers has sold every brick he had, so that any brickwork done in the near future for which brick has not already been provided will have to be done with such as may be gotten outside of Charlotte and freighted here. —Charlotte (N. C.) Observer.

There are very few towns in this country in which building is progressing so rapidly that the brick manufacturers cannot fill the demand. It indicates how rapidly Charlotte is developing.

THE MANUFACTURERS' RECORD publishes today the first full account given of the proposed mineral display of the South at the Atlanta Exposition. From this it can be seen that this will be the most comprehensive mineral exhibit ever made at any exposition. The South's resources will be presented in a way that must prove of enormous value.

THE BUSINESS OUTLOOK.**Views of Leading Financiers and Business Men Indicate that the Upward Start Has Been Made.**

In response to an enquiry for their views upon the business outlook, the MANUFACTURERS' RECORD has received letters from leading authorities, such as bank presidents, iron and steel manufacturers and merchants, prominent railroad operators, heads of extensive commercial organizations and others qualified to give views on this subject from all standpoints.

While the writers take a conservative view, it is notable that nearly all express the belief that the outlook is for the better, that the corner in commercial matters has been turned, that business, both mercantile and manufacturing, is slowly but surely improving, and that the improvement will be permanent. The statements are appended:

C. P. Huntington's Opinion.

23 BROAD STREET, NEW YORK, March 27.
Regarding the business outlook, my own impression is—I might almost say I have no doubt—that business will continue to improve for some years to come; but, of course, there is no way of judging the future except by the past, and that would indicate a steady improvement from this time forward until the people become careless and leave the lines of conservatism, and then they will be shaken up and brought back to their better sense again.

C. P. HUNTINGTON.

Decided Change for the Better.

MERCHANTS' EXCHANGE,
ST. LOUIS, March 30.

From a local standpoint and representing the business sentiment of the Mississippi valley, I feel no hesitancy in saying that an improvement which started the first month in the year has become emphasized, and now gives me much encouragement to believe that a decided change—and a permanent one, I have no doubt—has taken place, and general information within the districts named advise a return of confidence, and increased hope has developed more energy on the part of our commercial and manufacturing interest than was visible any time during 1894. Many branches of business in our city show a very marked gain over the corresponding period of 1894, and some lines equal that of the beginning of 1893. Our banking institutions show increased offerings of commercial paper, and, while rates are still very low, the tendency is in the direction of hardening rates of interest. While business is showing a decided gain, the profits are still very light, and in consequence it is not probable that the substantial return of business will develop into marked improvements in public enterprises, but that we are on an ascending scale with no probability of back-sets seems assured.

THOMAS BOOTH, President.

The South Looking Up.

NEW YORK, March 27.

The general business outlook is greatly improved, but as my interests are all in the South, I can only speak from a Southern standpoint. That section is holding its own, and has been doing so for the past two years, while other parts of the country have been losing money. The South is pretty well out of debt and every indication points to material improvement. The diversification of crops will prove a great blessing to that section, in that it will keep in the South a large amount of money which has heretofore annually been paid to the West for food products.

The coal and iron section has got down to hard-pan and is improving. The manufacture of iron has increased and promises

still larger development. The company in which I am interested has sold 80,000 tons of iron in forty days, an average of 2000 tons a day. These sales are distributed from Maine to California. Coal and coke productions are in tip-top shape. Indeed, the coal production of the company in which I am interested is larger than ever before.

Cotton has seen its lowest price for a long time. Cotton mills in all parts of the South are working on full time and are making money. Indeed, some of the large mills in which I personally own stock are not only working full time, but are working night and day, using a double force of hands for this purpose, and although they have advanced the price of their production, they still have more demand than they can supply.

I predict that within five years South Carolina will have mills within her limits that will consume one-half of the cotton production of the State. Georgia is following closely, and other States east of the Mississippi will, in a measure, come along later.

The sugar industry has turned the corner, and improvement, while slow, will be steady and sure.

The currency question is practically settled. The manner in which the administration dealt with the bond syndicate, and the method by which the latter handled the bond issue, has settled the question, at least during the Cleveland administration. At the end of that time the republican party will come into power, including the presidency, and the silver craze will die out as the greenback craze did.

I believe the steadily increasing production of gold throughout the world will give a plentiful supply to go around. So far as the proposed International Monetary Conference is concerned, it will not lead to anything, as England will not become a party to it. I think the action of the German Reichstag is purely a bluff made to appease the growing populist feeling in that empire. The silver and the currency questions want to be let alone, but the national-bank act needs some amendment.

The leading railroads of the South are being operated on a low basis and are all in a healthy condition. The pooling bill, if Congress had seen fit to pass it, would have proved a great boon to merchants in all parts of the country, as it would have established uniform rates, prevented cutting and prevented one shipper getting undue advantage over another.

JOHN H. INMAN.

Railway Business Picking Up.

CHESAPEAKE & OHIO RAILWAY CO.,
RICHMOND, VA., March 30.

There is no question whatever but that business is picking up; the various manufacturers are getting orders; the shipments by railroads are more, and the passenger travel is larger. This business I feel quite sure will improve from now on. We hope to keep going ahead until next July or August, when with good crops we will be on a steady march.

M. E. INGALLS, President.

Business Will Improve.

RICHMOND LOCOMOTIVE & MCH. WORKS,
RICHMOND, VA., April 1.

In my judgment the general business situation will improve from now on, but not necessarily with any great rapidity. The better feeling that prevails will bring this about. You must take my words with some allowance, as my feeling can be too readily accounted for in recent large orders for locomotives from several of the roads that have been placed with us; but beyond

question, when the railroads begin to buy power, the long night is about over. Our very large iron-furnace interest here is in better spirits than for two years.

W. R. TRIGG, President.

Increased Demand for Iron.
COOPER, HEWITT & CO.,
NEW YORK. March 28.

In reply to your letter of the 27th inst. asking me to express an opinion in regard to the prospects of business during the coming year, I can only say that in some branches of industry in which I am engaged there are indications of a revival produced by an increased demand. My impression is that we have seen the worst of the business depression, but that there cannot be any such revival as we desire to see until the currency of the country is placed upon a stable foundation. The silver mirage must be extinguished from the public mind before capital, either foreign or domestic, will be available to any great degree for new enterprises; and it is upon them that we must depend for any decided developments of the resources of the country, which are as abundant as ever, and can be made a source of great prosperity whenever our people shall have learned by bitter experience the excellent lesson that the standard of value must be rigidly kept upon the basis of gold.

ABRAM S. HEWITT.

Industries Are Recovering.

BOSTON, March 27, 1895.

There are many indications that the suppressed energy which for so long a time has been kept back by the doubt and distrust due to the silver craze, can no longer be suppressed even by that. The bold and determined action of the President in maintaining the unit of value under the mandate of the law has in part restored confidence. I am not permitted to give details, but from my point of observation, which is one of unusual advantage in respect to factories, workshops and the like, I witness a sure recovery from the period of greatest depression—moderate stocks of goods with very few exceptions, and in at least one-half of these establishments an urgency of demand, giving assurance of activity for many months to come. Outside of what comes within my personal knowledge, it may be remarked that the orders for iron ores in the Lake Superior district are the largest by far ever known in industrial history, and there is no barometer so certain as the quick demand for iron and steel.

Again, I observe in a late number of the papers that the New York Central Railway has just given the largest order for freight cars of a new and improved kind that has ever been given in history.

It is to be remarked that in many branches of industry skilled laborers are not easy to find. It is noticeable that the makers of the highest repute of electric apparatus are under an urgent demand. It is noticeable in the recent report of the bureau of statistics of labor of Minnesota, one of the great wheat-growing States, that the payment of mortgages has continued even through the panic, and that the mortgage at the present time on the farm lands of Minnesota is less than it was in 1890—far less than it was in 1880. All that remains to be accomplished is absolute assurance of the maintenance of the present unit of value, accompanied by the steady and sure withdrawal of government demand notes from circulation, all of which has been left by Congress in the power of the administration to accomplish, and then this country may become the "safe deposit" of Europe, where the present disturbed condition of affairs renders business undertakings very uncertain. Nothing but the stupidity or worse of those who are playing politics, and who would deprave the currency of the United States, can prevent prosperity from returning very soon.

The huge abundance of capital which has for a long time been wholly or partly inert may presently be moved for investment. Whether or not it will move into the Southland rests very much upon the attitude of Southern politicians on the silver question. If they adhere to the silver craze, free coinage, populism and other causes of distrust, capital will find a place for its use somewhere else, and not where the public men betray and impair the credit of their own States, as well as of the nation.

EDWARD ATKINSON.

Encouraging and Hopeful.
SOUTHERN BANKING & TRUST CO.,
ATLANTA, GA., March 29.

The air does seem to be clearing and I am hopeful for the best. Looking at this in a cold-blooded way, however, it would seem that after the great shock and depression that all interests have felt, and taking into consideration the degree to which the courage of investors and capitalists has been impaired, that we could only regain a plane of prosperity by a long and tedious upbuilding process. However, more than half the battle is won when the feeling and sentiment of the people is changed, and even when we become convalescent and new hope is inspired and new courage begins to grow, things already have assumed an aspect that is in the highest degree encouraging and hopeful. There seems to be some indication that such a change has or is taking place in the minds of the people. The old feeling of despondency and hopelessness seems to be rapidly disappearing, and at least I can say that I hope we have seen the bottom, and that we are climbing the up-grade on a return to better times. I am speaking more with the whole country in mind than with our particular section. Atlanta, all through the troubles which the country has been experiencing, has been more or less an exception, and with our exposition coming on things are rapidly brightening here, and I trust that the change is to be one of permanency. Of course the volume of business here is still below normal and there is not much activity in a good many lines, but I cannot help feeling renewed hope, and there has been scarcely a period in the last two years when I would have said as much as this.

H. M. ATKINSON, President.

Significant Iron Sales.

TENNESSEE COAL, IRON & RAILROAD CO.,
BIRMINGHAM, ALA., March 28.

We beg to state that our sales of pig iron for the month of December, 1894, were 27,000 tons; January, 1895, 31,000 tons; February, 1895, 42,000 tons. They have already passed for March, 1895, 52,000 tons, and are still coming in by every mail. In view of the increased railroad traffics and bank clearings, the increased use of money all over the country, the cessation of gold exports, the improvement in stock markets and the evidences of returning activity on the part of capital, we anticipate a continuance of the present indications of improvement.

The country has borne the shock of the fiscal panic, the change in tariff conditions and the severest industrial disturbances of a decade, and with all these matters behind us and the accumulated requirements of the country for the past three years ready to be given out, we see no reason why business should not gradually revert to something nearer normal conditions than prevails at present.

J. BOWRON, Secretary and Treasurer.

Business Healthier.

SLOSS IRON & STEEL CO.,
BIRMINGHAM, ALA., March 28.

I think that we have passed the lowest point of the depression, and that the general business situation is healthier than it has been for several years. While I see no indications of anything like a boom or very rapid recovery, I believe the improve-

ment will continue, and that the causes of the improvement are sound.

T. SEDDON, President.

Tide of Prosperity Returning.

BANKING HOUSE OF
JOHN L. WILLIAMS & SONS,
RICHMOND, VA., March 27.

The only thing in the way of a general return to business prosperity is the silver craze. We regard it, however, as so flagrant a folly, so obviously against common sense and common character, so shallow a fraud and so plainly a consequence of a generally low condition of our commercial system, that it must, we think, disappear with a return of general healthy and legitimate business.

We have had a long and dreary night, and we think there is abroad the air and light of dawn. And everybody seems to be waking up to that as a fact. Business has its tides, and the ebb and flow of it are ordered by a power above human wisdom or effort. It is time now for the return of the tide. JOHN L. WILLIAMS & SONS.

A Baltimore View.

HAMBLETON & CO., BANKERS,
BALTIMORE, March 27.

Relying to your inquiry of 26th inst., we consider that all indications point to a restoration of confidence and an improvement in values. This country has passed through five years of liquidation, and we think it is now established upon a sound basis.

HAMBLETON & CO.

American Iron and Steel Association.

Mr. James M. Swank, general manager of the American Iron and Steel Association, of Philadelphia, Pa., gives the following views:

"Despite some unfavorable symptoms, there are many signs that a sure, although slow, lifting up of industrial conditions in this country is taking place. Prices of wheat, corn, cotton and some other agricultural products have risen during the month of March. Railroad stocks have advanced slightly. The commercial agencies report increased manufacturing and trading activity in many of the great cities and industrial centres. A buying movement is distinctly noticeable. The coal and iron trades present hopeful signs. Mr. Frick has advanced the wages of his coke-workers 15 per cent., and the other large operators in the Connellsville region have conceded a like advance. Mr. Rainey advancing the wages of his men 16 per cent. The striking coal-miners in the Pittsburg district have very generally received the advance in wages they asked for and are at work. The advance in the wages of the coke-workers means that the present low prices of coke are soon to yield to higher prices, and higher prices for coke mean a hardening of pig-iron prices, and firmness in pig-iron prices means better prices for finished iron and steel products. The large consumption of these finished products is now a subject of general remark. Consumers of iron and steel realize that the bottom of prices has at last been reached. Altogether it may truthfully be said that the business situation has surely improved in March, and that the outlook for April and May promises still better results."

A LINE OF steamships is to be established between Fernandina, Fla., and Hamburg, Germany, by Barber & Co., steamship agents, of New York. The first vessel, the Kingsdale, will leave April 15.

THE Evening Herald is a paper which has just made its appearance at Macon, Ga. Mr. W. G. F. Price is its editor. An addition to the list of Southern monthly papers is the "Farm, Furnace and Factory," published at Roanoke, Va. The MANUFACTURERS' RECORD trusts that both publications will make their influence felt for the good of their respective localities.

MILLMEN IN THE SOUTH.

New England Manufacturers Representing \$20,000,000 Capital Inspecting Southern Resources.

[Special Dispatch to MANUFACTURERS' RECORD.]
CHARLOTTE, N. C., April 3.

It will be remembered that a few months ago the MANUFACTURERS' RECORD secured the exclusive publication of a report made by Mr. W. C. Lovering, president of the Arkwright Club, of Boston, to the members of that club, upon some phases of the cotton-manufacturing capabilities of the South. One of the results of that publication was the bringing of Mr. D. A. Tompkins, of Charlotte, N. C., into communication with Mr. Lovering through a letter of introduction from the editor of the MANUFACTURERS' RECORD. Mr. Tompkins presented many new features of the South's manufacturing advantages to Mr. Lovering, and invited him to make more thorough investigation of the South than he had done. Following this, the Seaboard Air Line extended through Mr. Tompkins an invitation to Mr. Lovering to make a trip over its lines with such of his friends as he might wish, as guests of the Seaboard system.

The members of this party, who have for the past few days been investigating the cotton mills of the Carolinas, are among the foremost cotton men of New England. They represent nearly, in their own control, about 1,500,000 spindles, or an invested capital in cotton-manufacturing of \$20,000,000 or more.

The New England party consists of the following gentlemen:

Mr. Wm. C. Lovering, president of the Arkwright Club, of Boston.

This club is made up of the owners and treasurers of the principal mills in New England. Mr. Lovering has interests in various mills of more than 120,000 spindles. He is a careful student of industrial interests. He comes South with a number of manufacturers from New England, who have been selected by him, and the purpose is to learn what is really going to be the ultimate outcome of the cotton-manufacturing interests of this section. The party is practically a committee from that club, and the impressions they form and the conclusions they reach will be made known to the club on their return, and will be discussed by all its members.

Mr. Thomas Motley is a nephew of the historian. He represents the Chicopee, Saratoga and Vickery Mills.

Mr. C. W. Amory is treasurer of the Amory Mills, Manchester, N. H., and is also a director of the Amoskeag Mills, one of the largest cotton mills in the world.

Mr. Henry C. Howe is a partner of Lawrence & Co., who handle all the goods of the Pacific Mills, Lawrence and other large mills. He is also a practical manufacturer.

Mr. Arthur Amory sells all the goods of the Jackson Mills and Nashua Mills in Nashua, N. H., which mills have just got permission to go out of the State and build mills in other States to manufacture their own brand of goods. Mr. Amory is also the agent of the Lancaster Gingham Mills, at Clinton, Mass., and the Appleton Mill, at Lowell.

Mr. Henry B. Coxe, Jr., is in the mining business, and represents Coxe Bros., of Pennsylvania, who mine 5000 tons a day of Lehigh anthracite coal.

There were two other members of the Arkwright Club engaged to come on this committee who were detained by pressing business at the last moment. These were Mr. T. Jefferson Coolidge, treasurer of the Amoskeag Mills and minister to France during President Harrison's administration, and Mr. Howard Stockton, treasurer of the Merrimac Mills, Lowell.

Mr. D. A. Tompkins has charge of the party, and is accompanied by Mr. H. W. B. Glover, general freight agent of the Seaboard Air Line; Capt. T. W. Whisnant, superintendent roadway of the Seaboard Air Line, and Mr. J. M. Turner, trainmaster of the Seaboard Air Line; also by the editor of the MANUFACTURERS' RECORD.

It is quite probable that the outcome of this trip will be some very large investments in Southern cotton-mill enterprises in addition to what may be done by them in other directions. The influence of a favorable report from men of such pre-eminence in New England financial and manufacturing circles will be very widespread. This trip will no doubt prove one of the best advertisements that the South has had for some time, and the ultimate result will doubtless be the investment of a good many millions of dollars of New England money in Southern cotton mills and in other industries of this section.

R. H. EDMONDS.

SOUTHERN MINERAL WEALTH.

Complete Description of the Elaborate Exhibit to be Made at the Atlanta Exposition.

[Prepared for MANUFACTURERS' RECORD]

The fundamental idea of an exhibit of mining at the Cotton States and International Exposition was developed in a conference between the Secretary of the Interior, Mr. C. A. Collier, president of the Exposition Company, and Mr. C. D. Walcott, director of the United States geological survey. Mr. Walcott proposed that it would be particularly instructive to so arrange the exhibit as to make a systematic display of the minerals of the Appalachian system. This idea quickly met with general approval, and the preparations have already gone so far as to show that it can be carried out, thus giving a practical demonstration of much that has appeared on paper in regard to the mineral resources which the Appalachian mountain system contains. Of course, if this idea of representing completely the Appalachian system in its mineral resources were to be carried out, the exhibit must extend from the White mountain portion of this system to Alabama, and the Southwestern States would be omitted. Therefore the systematic plan has been limited to the Appalachian system from the northern border of Maryland through to the gulf and southwest to include Texas.

Two forms of arrangement of the minerals are under consideration. The simpler of these contemplates a division of the floor space into bands from one side of the building to the other, each band being devoted to a separate State. Similar bands running lengthwise of the building would be devoted to an arrangement of the exhibit, according to minerals. Thus a band along each side of a central aisle would be devoted to a display of building stones, so that the resources of each State in this product would occupy a like position in the section devoted to each State, making a continuous band of building stone down the space allotted to the mining exhibit. A similar band would be devoted to coal, another to iron ore, and so on, as far as such a system is possible with the varied resources of each State. To carry such a system out in great detail is not thought of, as there are several States which would thus have assigned to them space for materials which they do not have to exhibit. Nevertheless, this arrangement at once impresses one with the considerable number of States which show almost every important factor in mineral wealth. According to such an arrangement as this, the visitor who is brought to the building by State pride and is interested no further than to see his own State's exhibit can traverse the building from one end to the other and see all that his State has to show, while the coal expert by only walking through the building in the other direction will be impressed by a display of coal which could be made by no other similar group of States.

A modification of this plan is under consideration which also has many attractive features. According to it there are two aisles running diagonally across the space allotted to the mining exhibit from corner to corner, crossing each other in the middle. There would thus be simply two aisles, one as much a main aisle as the other, and along these two aisles the section devoted to each State would face, and one would be given exactly as much main aisle space as another. Around the outside edge of this space would be arranged the building-stone display, and next concentrically in this would be the display of clays; then a hollow square of coal exhibits, followed by iron ore and exhibits of other minerals requiring less total space, and decreasing in their general importance as the centre is approached. This centre is to be occu-

pied by a large case containing a collection of the precious stones of the South, while each one of the four corners meeting near the intersection of these middle aisles would be conspicuous places for an exhibit of the attractive gold and other ores.

Whichever of these methods of arrangement is adopted, it will be the plan to make the unit size of the specimen exhibited have a definite meaning. For example, the effort will be made to have each specimen of coal exhibited be a built-up section of the entire vein of coal, showing the formation above and below, in order that besides the quality of coal, the specimens may exhibit the commercial value of the seam from which they are taken. There seems to be no other way for justly representing the extent of the South's coal resources; similarly in regard to building stone. The hint will be taken by the Colorado exhibit of sandstone and granite at the World's Fair. Here, in the various State displays in the Mining Building, hundreds of small cubes of stone were shown, one side polished, another rough and another pointed, in fact with all the variations of treatment which the stone-mason could give them, with nothing to indicate the ability of the quarry from which the stone came to furnish large and merchantable pieces. Such cubes of stone might come from a valueless quarry, or from one of great importance; they told nothing. Colorado, however, was more ingenious, and displayed as its unit-stone specimen a column, the cylindrical portion of which was polished, the base rough and the capital carved, thus showing the treatment of which the stone was capable, and by the size of the specimen proving the quarry's ability to furnish stones of large dimensions. There was no label and no explanation necessary for this display, and further, when the exposition was over there should have been no trouble in disposing of so merchantable a product as such a column of stone. The building and ornamental-stone resources of the South will admit of a beautiful colonnade of such columns around the entire interior of the mining space, a demonstration of mineral wealth in this material which cannot fail to impress and delight all who see it.

A much more difficult task will be the representation of sections of the iron-ore resources of the South, but this has been undertaken on the same generous scale. It will be impossible in the case of coal, iron and building stone thus to represent half the deposits, but a chance for enterprise will be thus afforded those who first comply with the invitation to furnish samples of the desired size and shape, and the detailed effect will be far more impressive and valuable than a miscellaneous exhibit of small, meaningless specimens. Besides the iron ores, the products which have been obtained from them will be on exhibition. A similar representation will be made of the clay resources of the South and their products, and it is probable that nothing in the building will make as profound a sensation as the wonderful resources of the South in clays of every possible kind, although it is well known that from the purest rock kaolin through the sedimentary varieties to the common brick and terra-cotta clays, there is no purpose for which proper clay cannot be furnished; but the optical demonstration of this will be overwhelming. In like manner attention will be given to a systematic display of phosphate rock of Tennessee, North Carolina, South Carolina, Georgia and Florida, the marls and phosphate nodules of Alabama and the apatite and calcareous and green-sand marls of Virginia. The mineral waters will make a large and instructive display when arranged so that each mineral constituent will be represented in exact proportions in which it exists in each specimen of water shown.

The plan of organization which is

adopted for this work will be to seek the aid of the State officials in collecting the desired materials, and for this purpose the work has been subdivided so that the organization of the building-stone exhibit is entrusted to Dr. William C. Day, who has charge of the same work for the national government for the volume, "Mineral Resources of the United States." Coal will be in the hands of Mr. E. W. Parker, the coal statistician of the geological survey. Iron ores go to the charge of the well-known expert, Mr. John Birkinbine. Clays will continue in the hands of Mr. Jefferson Middleton, who is now compiling the first complete statistical report on this subject for the geological survey. Mr. Joseph D. Weeks will care for petroleum, natural gas and the deposits of manganese ore.

So far the work of collection has been done most thoroughly by Mr. George F. Kunz, of Tiffany & Co., who is already enthusiastically laboring in the cause, and has gathered at least 100 specimens of the gems of the South. To these he is daily adding new supplies, and it is probable that no collection ever made will be as complete and attractive as this one. Each of these experts is compiling a list of deposits which will be particularly desirable to have represented, although the applications which have been made will in several instances tax the space which has been provided. A particularly fortunate feature of this exposition will be the comparatively limited area to which this systematic exhibition is applied, and the possibility of so much co-operative spirit among the exhibitors as to make its success easily assured; but many other States have been asked to participate, and space will be provided for them; in fact, one or two States have asked for facilities for official State displays.

In addition to these exhibits, due to the co-operative efforts of the State and individual exhibitors, the United States geological survey will also make its entire economic exhibit in the mining building. This exhibit has been planned to include a statistical column showing the total product of each mineral in the South for a limited period of time, say, a minute or a half-minute. Another feature of the government's exhibit will be instruments for testing structural materials, and it is hoped that this machine will be in daily operation. The South's resources in road material will similarly be shown, and another feature will be a collection of typical ores from the regions which can furnish the most characteristic specimens. Exhibited with it will be the peculiar features, such as color, hardness, streak, etc., which are the commonest tokens by which the value of material may be determined by the layman.

There is one kind of information which the plans above outlined have not included. That is an exhibition of the undeveloped mineral resources of the South. There is nothing more common than the extravagant ideas of real-estate owners and promoters of the vague hidden wealth which they imagine their property may hold. But, on the other hand, are the many well-known cases of mineral deposits of undoubtedly value which have not received the slightest development, this, of course, being due to any one of many good reasons, principally inaccessibility, attributable to lack of railroad facilities, by which many deposits are now lying idle that a year hence may be furnishing large quantities of valuable mineral products. The newer the mineral development of a country the greater the relative importance of these undeveloped resources, and in the case of the South the manifest unfairness of showing only such deposits as are thoroughly developed needs no comment. It is difficult by means of maps, more or less indefinite, to attract attention or to fairly show such undeveloped regions; but the device has been suggested to have the eighteen windows which

will surround the mining half of the mining and forestry building filled with large transparent photographs, each window being devoted to a different mineral. The central photograph of each group would be a typical example of this mineral as occurring in the South, and arranged around it would be photographs of prominent places where this mineral occurs, but has not been developed. Marble Point, in Georgia, would be a conspicuous example of a deposit which is not yet developed, but could be well portrayed in a photograph, and it is expected that this series of window displays will be one of the most attractive in the building. Besides this, geological sections of portions of the country recently surveyed by the geological survey will be thoroughly pictured on a very large scale.

Looking over the South, it is interesting to note that there is no one of the Southern States which cannot exhibit several kinds of important minerals. There is no Southern State which cannot show coal deposits of some sort. Even Florida can furnish a small amount of coal. Iron ores are quite generally distributed, although the States vary enormously in their relative importance. North Carolina, the Sample State, will show everything in the mineral column; Virginia, West Virginia and Georgia's displays will be almost equally diversified, and, omitting as too well known the coal, iron, limestone and other resources of Alabama and Tennessee, petroleum from this latter State will also be a conspicuous feature, along with the representations of this great industry in West Virginia and Kentucky. But among the States almost unknown as mineral producers, Louisiana is a good example of what a region far out of the Appalachian system may develop. Louisiana has been a rock-salt producer for many years, with an annual product of many thousand barrels coming from the mines of Petit Anse. This salt is not only well known for cattle-feeding, but also as a dairy salt, as from its purity it may be ground and used without any refining process. Indeed, much of it as it is taken from the mine is as clear as ice, and blocks of considerable size may be read through with ease. A peculiar feature of this salt is a streak of dark color seen in it as it lies in the mine, but when it is taken out, broken up and ground, the dark color disappears. It seems to be a structural feature in the salt, and the dark color is more or less an optical illusion.

While salt is Louisiana's principal mineral feature, a small quantity of petroleum is produced also here, which is of such quality as to be suitable for lubricating purposes without refining, and, indeed, the oil is so used on the Southern Pacific Railroad; unfortunately, the yield is not great, though in quality it is much better than that from other regions. Lately much attention has been paid to the deposits of sulphur in Calcasieu parish, where this material has been providentially protected by a deep covering of quicksand which has for a long time resisted the efforts of the miners. With the ingenious work which is being done on this sulphur bed at present, however, its utilization is only a question of time. There have also been discovered in this State carbonate iron ores, clays of great value, and no one can venture a guess as to the ultimate mineral resources which may be brought forward at any time from this region. What we do not know of the mineral resources of Louisiana would fill a book. What has been said of this State can be said even more forcibly of Texas, from which economic minerals of almost every kind will be shown, including the lately discovered deposits of cinnabar in the mountains south of Marfa Station, on the Southern Pacific Railroad.

But these examples are sufficient to show that the task of adequately representing the South at this exposition is no easy one, and the probabilities are that the mass

of material which will be presented will be the principal obstacle to successful classification. The inevitable problem of wrestling with a mass of material enormously beyond the capacity of even the generous space allotted by the Exposition Company will be presented as usual. But the writer expresses the hope that, with the co-operation which has been promised, the object of the mining department of showing to those who visit the exposition that what has been written of the South can at least be given optical demonstration, will be gained.

PROSPERITY AT HOME.

A Benefit of Immigration that Southern Parents Should Realize.

NEW YORK, March 26.

Editor Manufacturers' Record:

Replying to your question touching the duty of our Southern people to their rising generation in the matter of immigration, there can be no question that the sure method of advancing the interests of the youth of the South and of making them contented and prosperous at home is by bending every energy to increase their home advantages and local opportunities for social, intellectual and business growth. The foundation for this is a healthy immigration, which is at the command of every community, constitutes no tax upon its present resources, and, if properly applied, will invariably yield most satisfactory returns. It never comes of itself or by individual effort, except in such a desultory and sporadic manner that it cannot be called immigration. An occasional or isolated settler in any community, whether country or city, adds nothing to its wealth or his own happiness. His individuality will avail nothing, except to increase his disappointment. He cannot forget the absence of old associates, old ways, old surroundings; but let those, even to a limited extent, be brought with him, and the whole situation is transformed. Individual gives place to aggregate or community conditions, and schools, churches, workshops and homes become common meeting-ground for similar modes of life.

Continued effort, therefore, is absolutely essential in any community for successful immigration, and for that reason States, cities, counties, private corporations, and especially the railroads of the South, must use every effort to add to its industrious population. Today this is self-preservation. A few years hence it will be wealth and power.

The South will never grow as it should until this is done. Instead of 7000 settlers per week, as now received, under a proper combination for this purpose, 25,000 substantial settlers per week from the Northern and Eastern States alone can be favorably located in 1895 along the lines of our Southern highways.

Then, and not till then, will opportunities be offered at home to our Southern youth which will end this disastrous exodus from the country districts. Let the older heads look to it for their children's sake.

HUGH R. GARDEN.

To Encourage Industries.

The people of Mooresboro, Cleveland county, N. C., offer thirty-five acres of land free to anyone who will build a \$100,000 cotton factory at that point. The town has good railroad facilities, good water, and building material is cheap.

THE Riverside Land & Irrigation Co. is a corporation which is to begin rice culture on an extensive scale in Louisiana. The company will dig a canal six miles long and sixty feet wide to irrigate about 3000 acres of land for rice-growing near Jennings, La. O. S. Dolby, of Lake Charles, is president, and S. J. Johnson, of Jennings, vice-president. The capital stock is \$50,000.

A Possible Revolution in Cotton-Handling.

The MANUFACTURERS' RECORD learns that the Bessonette system of baling cotton continues to attract increasing attention. Mr. Jerome Hill, who, as recently stated, has taken the entire management of the territory east of the Mississippi river, in an interview a few days ago, after returning from some Southern and Northern points, stated that "leading railroad authorities who have looked into the Bessonette, and have had it investigated on their own account, more than confirm all the claims that have been made for the revolutionizing power of this new system. There seems to be no question, according to what these reports say, that the Bessonette will effect a saving of from \$3 to \$4 a bale on every bale of cotton handled."

"The first combined cotton gin and compress ever built, and what is said to be the finest ginnery ever constructed, is now being put up at Waco, Texas. This plant is designed to handle 200 bales of cotton a day. It takes the cotton direct from the farm wagon, gins it, compresses the bale and delivers the compressed cotton at the opposite end from which the seed cotton was received. Under a test a wagon-load of seed cotton was delivered in the shape of completed covered bales within thirteen minutes from the time the suction pipes drew the seed cotton from the wagon.

"The remarkable thing about this system—remarkable considering the enormous advantage which it has—is its cheapness. A few days ago a railroad president, to whom all the good qualities of the Bessonette system were being explained, expressed his deep interest, but his fear that any such system so complete must be too expensive for general introduction in cotton ginneries. On the contrary, I explained that a complete cotton gin and compressing plant capable of handling all of the cotton in an area of eight or ten miles could be built for \$7000 or \$8000.

"If the Bessonette system can do what is claimed for it," said the president of a leading railroad to me, "you not only revolutionize the handling of cotton, but you make possible many improvements in connection with the cotton business that will add to the profits of all railways interested in handling cotton, while at the same time adding enormously to the profits of the farmer."

In his interview with the MANUFACTURERS' RECORD Mr. Hill added: "The president of one of the largest railroad systems in the United States recently sent to Waco without my knowledge and had the Bessonette system carefully investigated by his own engineer, and when I was in New York this report was handed to me. It fully confirmed all that my own investigations have led me to feel as to this press.

"As one illustration of what is thought of it, the following letter from the Kingsland & Douglas Manufacturing Co., of St. Louis, one of the oldest and largest concerns in the country building cotton-handling machinery, will be of interest:

ST. LOUIS, Mo., March 23.

MR. JEROME HILL:

Dear Sir—The writer visited Waco, Texas, a few weeks ago and saw in operation the Bessonette cotton compress, and was much surprised to see so simple and compact a press doing such wonderful work. We believe it will revolutionize the entire handling of cotton, and from our experience of thirty years as manufacturers of cotton presses and cotton gins, know it will, if properly placed before the people. In its operation it clearly demonstrated the fact that it will bring the ginner and spinner in direct contact, and do away with those who have heretofore acted as middlemen in the handling of cotton, to say nothing of the excessive wastage and samplage.

We also observed with much wonder that the bale was practically non-combustible, and that bagging and ties were not used in protecting the bale. In short, it revolutionizes the entire handling of cotton, and will be the means of saving, keeping clean and keeping in good condition

all cotton that passes through the gins until it reaches the spinner.

We can not say too much for this press and the wonderful character of the work it does.

KINGSLAND & DOUGLAS MANUFACTURING CO.,
Per L. D. KINGSLAND, President.

The intention of the Bessonette people is to organize a local company in each county in the South to erect one or more plants.

BUSINESS CONDITIONS SOUTH.

Extracts from Letters to the Manufacturers' Record.

San Antonio, Texas—The Maverick Litho-Printing Co.: "Trade is looking much better. People are in better spirits than they have been for four years."

Atlanta, Ga.—Albert L. Beck: "The business outlook is very good and picking up rapidly in all lines. The Cotton States and International Exposition to be held here this fall has already shown its good effects, and causes much local activity in all lines of trade."

Longwood, Fla.—E. W. Henck: "Business outlook is, in my estimation, better than ever. True, the late cold has destroyed many of our orange trees, and there will be little fruit for two years, but this loss will drive farmers to devote more time to general farming and to diversify their crops. In the end this will greatly benefit the State as well as the farmers. We have plenty of nerve left, and are still in the ring."

Carthage, Mo.—J. L. Moore: "Owing to the diversity of resources, our county has not suffered so much from the panic as many other sections. We produce in large quantities zinc, lead, building stone, lime, brick, flour, wheat, corn, oats, hay, apples, berries, stock, etc. This county exports \$2,000,000 more of her product than any other county in the State. We have an abundance of water and many water-powers in the county."

Aransas Pass, Texas—Redfish Bay Channel, Wharf & Dock Co.: "Prospects for development in Southwest Texas at present are splendid; cattle interests in better shape than usual; good rains all over this section; bonus in aid of opening Aransas Pass (removal of bar) about all raised, and the prospect of early resumption of work at this point good; railroad building in Texas will likely take a new start, and prospects all around much better for this section."

San Antonio, Texas—The Oppenheimer Brick & Tile Co.: "On account of recent rain, giving us an abundance of grass and water for spring and summer pasture, the outlook and prospects for Western Texas are brighter than for some years past. We expect this coming spring a good deal of emigration from the Northwest and from Southern States, as all can find fertile and cheaper lands in this part of Texas than anywhere else in the United States."

Farmersville, Texas—L. E. Bumpass: "Business of every description is usually dull for this season of the year; the dullness is attributed to low price of cotton. However, the farmers appear to be better off financially than in former years. The agitation of silver legislation has no doubt caused loss of confidence. Home men who have money are afraid to invest or turn it loose. There is nothing doing in the way of buildings, both in city and country. Acreage in cotton will be cut down fully 40 per cent.; oat crop increased about 150 per cent.; corn crop increased about 35 per cent.; wheat nearly all killed by January freeze; if the dry weather continues fear the crop will be late and short. The present indications are more favorable for good trade this fall than last. Our merchants are buying very cautiously this spring, making no new credits, selling none but the best farms on time and limiting nearly all credit sales, even to best men, a thing that was never done here before."

TO BUY SOUTHERN FURNACES.

Northern Parties Negotiating for a Large Iron Plant.

A dispatch from Sheffield, Ala., states that J. W. Adams and other capitalists from Allentown, Pa., are negotiating for the purchase of the Cole blast furnaces at Sheffield, also of the Gamble coal mines near Jasper, Ala., and a plant of 300 coke ovens in connection with the mines. The Cole furnaces are three of the five now in Sheffield. They are among the largest and best in the South, the five having a capacity for producing 700 tons of pig iron per day. The three mentioned will produce about 500 tons daily. They are well located for securing ore and fuel at a minimum cost, and in a rich ore section of the State. The sale will involve the investment of about \$350,000.

A Question of Control.

Shall we control the Nicaragua Canal, or will we give it up to England? This question is assuming serious proportions.

The MANUFACTURERS' RECORD of last week contains a letter from C. P. Treat, an extensive Chicago contractor, now in London. Mr. Treat was at one time engaged in railroad building at Nicaragua, and is thoroughly versed in matters pertaining to the country and its possibilities. The following extract from the letter is significant:

"I have been consulted by some of the capitalists who are contemplating investments in the securities of the company, and who afterwards made such investments. One of them is a large ship-owner of Liverpool, who was secretary of the admiralty under the Gladstone government of 1886. He is fully convinced of the practicability of the canal as a private enterprise, and of its desirability as an investment. He has already put several thousand pounds of his own money in, and is ready to follow that up with much larger subscriptions. He is a leader in financial matters in England, and many capitalists are ready to follow him. I have also seen letters from some Scotch millionaires who are shareholders in the Suez Canal, and I have seen their checks in payment of their subscriptions for stock in the canal construction company. I know it to be a fact that before Mr. Bartlett, chairman of the reorganization committee, left London, he had assurances from leading men here of their support with their money and their influence in pushing the building of the Nicaragua Canal to successful completion, and that he felt entirely sure that the company could raise all the money required in Europe and America to build the canal independently of the United States government. * * * I believe the canal will be built very soon, whether the American government takes it up or not."

British capitalists look on the Nicaragua Canal as a good investment. They look on its control in their interest as a better investment. Can we afford to let them control it? France, to a greater extent than any other country, built the Suez Canal. After it was built England acquired a controlling interest in it, and its benefits are almost monopolized by the English.

Does this teach us nothing? Can we afford to place our interoceanic commerce in the hands of England? And worse still, in the event of a war, can we afford to give England the control of the shortest route between the Atlantic and the Pacific? Would this not place us at the mercy of her fleet?

England shows her appreciation of this undertaking. Her capitalists are already investing in it. We must act now or never.

By providing for the construction of this canal there is a possibility, though only a remote one, of our losing a small amount

on the bonds we are called on to endorse. By delay there is a probability that amounts almost to a certainty of giving to a foreign power the key to the commerce between the Atlantic and the Pacific, and giving it the control of this canal for the devastation of our coasts in the event of war. The question is not, "Can we afford to endorse the bonds of the Nicaragua Canal Company?" but can we afford to give England the control of a canal that will certainly be constructed within 600 miles of our seaports? We can easily afford to embrace this opportunity. We cannot afford to let it slip.—Jacksonville (Fla.) Times-Union.

A New Illuminant.

The New York Sun says:

"Mr. T. L. Willson, of Spray, N. C., has discovered a cheap method of making acetylene, or illuminating gas, which is the lowest of the hydrocarbons—the lowest in hydrogen and the richest in carbon. A paper describing the discovery was read at a meeting of the Society of Chemical Industry, in the College of Pharmacy Building, on Monday night. Mr. Willson found out how to make the gas cheaply while trying to discover something else.

"He was using an electric furnace, and a mixture of lime and anthracite dust he was using fused into a heavy, semi-metallic mass. That wasn't what Mr. Willson was looking for, and he threw it into a bucket of water in disgust. The water effervesced violently and gave off the heavy gas, which was soon identified as acetylene. The solid was found to be carbide of calcium, and a pound of it yielded 5.3 cubic feet of the gas. Heretofore the manufacture of this gas has been costly.

"Mr. Willson came up here and explained the process on Monday last before the Society of Chemical Industry. Dr. J. J. Suckert arranged a series of burners, connected with a bank, along the lecture table, and turned on the acetylene. The American Druggist and Pharmaceutical Record says the lights burned with dazzling brightness and were white and steadfast, with no blue centre. Mr. Willson said the samples of calcium carbide used to produce the gas, simply by its own decomposition in water, were part of a two-ton lot which had been turned out of his works in North Carolina. He said the stuff would keep a year without deterioration. He said he was producing more than a ton a day with 134 horse-power. He intends to apply 5000 horse-power and get out nearly seventy tons a day. He also said he thought that calcium carbide could be produced for \$5 a ton, and could be sold with profit at a price that would make it possible to sell ordinary illuminating gas at five cents a thousand cubic feet.

"Already the gas is being used experimentally in a house in this city. A small converter in the cellar of the house is connected directly with the ordinary gas pipes formerly used to convey the usual kind of gas from the street main. By turning a valve water is admitted, and the gas is generated in the converter; upon turning it back the generation of gas ceases. It is proposed to use this method for country houses.

"The gas, it is said, may by pressure be changed into liquid form, and sold in that form in closed and fitted cans ready for attachment to the gas-supply pipe of a house. Another proposition is to use the solid calcium carbide for individual lights, such as a stand lamp, generating the gas on the spot, or for lighting streets and railroad cars.

"Ordinary burners, being too large for acetylene, smaller burners will be used. It is said that the burners will let out one foot of gas an hour, and that that flame will be about fifty candle-power, and have only one-half the heating power of common gas."

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 158.]

A Great Railway Project.

A few weeks ago the MANUFACTURERS' RECORD reported the organization of the Chesapeake, Shenandoah & Western Railway, and outlined arrangements that are being made by the Old Dominion Construction Co., of No. 1 Broadway, New York, for building this line. Mr. E. C. Machen, of the construction company, was in Harrisonburg, Va., last week, and arranged for commencing work immediately for surveying the line, to be promptly followed by its construction from Harrisonburg westward. This promises to be one of the most important railway movements that have been made in the Virginias for a long time. The building of this line will open up a country of almost incalculable wealth, which only needs railroad facilities to bring about great activity and industrial development.

This projected line promises to prove a most important factor in the development of parts of Virginia and West Virginia. It will open up what is said to be the largest tan bark region in America, and thus furnish a new source of supply for the great tanneries at Luray, Harrisonburg and other points in the Valley. It will make possible the utilization of vast tracts of fine timber, and also the development of one of the largest coal regions of that great coal State—West Virginia. There ought to be no question about the active co-operation of all the local people in this line and an active aid in its construction. Rockingham county, Va., has shown its spirit of enterprise by a subscription from the people of the county as individuals of \$150,000. This is worth far more in effect than a county subscription. It shows that the people are ready to put their own money into such an enterprise, and not simply ready to vote the county money. In many cases the latter is a most excellent thing if it secures the building of a railroad, but it is a still better illustration of enterprise when the money is individually subscribed.

A Progressive Policy.

The Seaboard Air Line has adopted a very progressive policy in its efforts to develop the territory along its line. One of its latest efforts is to secure full and accurate information on every point which may be valuable to parties desiring to locate at towns or in counties along its route. Vice-President St. John accordingly has prepared a blank which is to be forwarded to each station agent. This blank contains twenty-four questions, which are to be answered by the agent in spaces allotted to each. The questions cover the following points: Population; number of schools and churches, and whether for white or colored people; area of cultivated and uncultivated land; character of soil; different products and kinds of fertilizer used; climate; frequency of rainfall; water supply from local streams, also water-power available; kinds of forest timber; principal occupations of people; different kinds of live-stock raised, as well as dairy products and poultry; principal fruits and kinds best adapted to the locality; different kinds of vegetables raised, specifying quantity per acre and varieties most profitable; most important local industries; average sizes of farms; description of coal, stone and clay or other valuable deposits, also of factory sites; extent of public improvements; special features for health, such as medicinal springs, etc., and acreage and character of improved and unimproved lands for sale, with price.

As will be seen, the replies to these questions will furnish a literal encyclopedia of information which will be of the most valuable character in advertising the country traversed by the Seaboard Air Line, while

by it prospectors and homeseekers can obtain in a few moments data which might necessitate weeks of travel to gain in any other way.

GEORGIA SOUTHERN & FLORIDA

To Be Reorganized at Once—Statements of Bondholders.

Mr. W. Checkley Shaw, chairman of the bondholders' committee which has purchased the Georgia Southern & Florida, informs a representative of the MANUFACTURERS' RECORD that the company will be reorganized at once and a practical railroad man selected as president. The present bondholders' committee will constitute the board of directors. No officers have been selected as yet, and some of the present officials may be retained. Mr. Shaw corroborates the statement already made in the MANUFACTURERS' RECORD that the Seaboard Air Line is not negotiating for the purchase of the line. The bondholders, however, will sell it to any company which will agree to their terms. The price fixed for the line was \$3,000,000—\$420,000 less than its bonded debt. The road extends from Macon, Ga., to Palatka, Fla., 285 miles, through a very fertile country, and is now in excellent condition financially.

Richmond Locomotives in Demand.

The Richmond Locomotive Works, in addition to receiving an order for twelve locomotives for the Seaboard Air Line, has secured another from the Southern Railway Co. for fourteen engines. Eight of these are to be consolidations, with cylinders 20x26 inches, and for hauling fast freight trains, and six are to be 10-wheelers, with cylinders 20x24 inches, and for passenger service. The type of the passenger locomotives is that used in hauling the Florida special. The order is valued at \$145,000. The works had already received orders from the Southern Company since its reorganization for seven locomotives.

A definite order has also been given the Richmond Works by the Chesapeake & Ohio for a compound locomotive to be exhibited at the Atlanta Exposition. This locomotive will have upon it every appliance and improvement known in locomotive building.

To Begin Work at Once.

Manager Geo. H. Bunch, of the Selmer & Tennessee River, writes the MANUFACTURERS' RECORD that work of construction is to begin at once on the road, which is to be twenty miles long, traversing the Shiloh battle-field. Mr. Bunch adds: "We will want one 35-ton mogul freight locomotive and one 30-ton passenger locomotive, one combination mail, baggage and express car, two passenger coaches, several flat, box and stock cars; also about 1500 tons 56-pound T steel rails, fastenings, spikes, frogs, switches, etc., for which we expect to pay spot cash, and want advantage of same in purchasing."

A Report Denied.

The MANUFACTURERS' RECORD has received a letter from President George M. Pullman, of the Pullman Palace Car Co., regarding the report that he was interested in a new railway line to be built in Mexico. Mr. Pullman denies all knowledge of the enterprise.

Another Elaborate Exhibit.

The Florida Central & Peninsular Company is preparing to be represented by an elaborate exhibit at the Atlanta Exposition, which will include products of the region it traverses besides other attractive features to be contained in an ornamental building.

Railroad Notes.

MR. J. W. FALLON has been appointed traveling agent for the Chicago, Rock

Island & Texas for the vicinity of Houston, Texas.

W. W. POPE has been appointed auditor of the Gulf, Colorado & Santa Fe line at Galveston.

MR. F. M. JOLLY has been appointed district passenger agent of the Plant system, with headquarters at Tampa.

JOHN DEMPSEY has been appointed master mechanic of the Central of Georgia in place of Frank McGhee.

THE Baltimore & Ohio has decided to use the electric block-signal system on its Pittsburg division, and contracts, it is stated, will soon be let for the work.

THE Cooke Locomotive Works, of Paterson, N. J., is filling an order for twenty 10-wheel engines for the Southern Pacific; eight of these have recently been delivered. These engines are for freight and passenger service.

AT the biennial meeting of stockholders of the Tennessee Coal, Iron & Railroad Co. at Tracy City the following new directors were elected: J. J. McCombs, James Swann, Jas. G. Moore and J. Edward Simmons, all of New York.

MR. W. S. MARTIN, late superintendent of the Owensboro & Nashville Division of the Louisville & Nashville, has been appointed to the position of superintendent of the Louisville line, made vacant by the death of Mr. William Preston Pike.

THE Southern States Passenger Association has organized at Atlanta by electing William W. Finley, commissioner, and H. Walters, of the Atlantic Coast Line, president. This body is entirely independent of the Southern Railway and Steamship Association.

VICE-PRESIDENT HAINES, of the Plant system; Vice-President Baldwin, of the Southern, and Superintendent Myers, of the Richmond, Fredericksburg & Potomac, have been selected to serve on the American committee of the International Railway Congress, which meets in London June 26.

THE management of the Atlanta & West Point and Western Railway of Alabama has recently issued a very attractive folder illustrating the Atlanta Exposition in connection with its train service. It contains a superb picture of the exposition grounds and a cut of each of the buildings that are to adorn the park.

THE board of directors of the Pennsylvania Railroad Co. has shown its confidence in the executive ability and policy of President Roberts by re-electing him. The manner in which he has conducted the affairs of the Pennsylvania through the period of general business depression has won for him the entire confidence of the stockholders.

THE Gulf, Beaumont & Kansas City Company, which is building its line in Eastern Texas, has held its annual meeting in Beaumont, Texas, and elected the following-named officers: E. E. Pratt, Boston, president; John H. Kirby, Houston, vice-president and general manager; W. C. Averill, Beaumont, secretary and treasurer; N. D. Silsbee, Boston, assistant treasurer; George D. Silsbee, Boston, assistant secretary.

Another Louisiana Salt Bed.

A correspondent of the MANUFACTURERS' RECORD writing from New Iberia, La., confirms the report of another valuable bed of rock salt near that town. It is located on Jefferson's Island not far from the famous Avery salt mine, the largest on this continent. The prospectors have bored through about sixty feet of rock salt located 260 feet below the surface. The manager of the Avery mine, Mr. Lucas, has examined the salt and made a favorable report as to its quality. The island is owned by Joseph Jefferson, the actor.

FINANCIAL NEWS.

To Discuss Banking Matters.

A movement is being made to bring about in Memphis, Tenn., during the last week in May a convention of delegates from all Southern States to discuss matters relating to a better currency system and better banking facilities. Papers and addresses upon the existing currency and banking evils will be read and delivered, and remedies suggested. When the matter has been thoroughly discussed by the delegates, an effort will be made to secure unity of opinion as to the legislation required; this opinion will be formulated into resolutions which will go before Congress, and in addition to this, an organized movement will be made to educate the masses up to what will be the ideas of the chief thinkers upon the currency problem—those who are in position to most accurately know the situation and judge of the proper remedies.

This Memphis conference will be an event of far more than local import. It will attract national attention as giving to the country the consensus of Southern opinion upon the banking and currency questions.

New Financial Institutions.

The Harris National Bank has been organized at Terrell, Texas, and has begun business.

A national bank is to be organized at Marlin, Texas, to be called the City National Bank.

The Phoenix Fire & Marine Insurance Co. has been chartered at Alexandria, Va., with John H. B. Jenkins as president.

The Merchants' National Bank of New Orleans has organized and elected the following-named officers: T. R. Roach, president; C. W. Mackie, vice-president; E. I. Johnson, cashier.

A new fire insurance company, to be known as the Mutual Assurance Co. of Georgia, is now applying for a charter. The promoters of the company are Hon. A. D. Candler, secretary of state of Georgia, and others. The company's home office will be located in Atlanta.

New Bond and Stock Issues.

The Maryland Trust Co., of Baltimore, has bought \$30,000 in 5 per cent. bonds of Fredericksburg, Va.

The city of Wilmington, N. C., will issue \$50,000 in 6 per cent. bonds for debt-funding purposes. S. H. Fishblate is mayor.

An issue of \$50,000 in Montgomery county (Ala.) bonds recently sold at 103 1/4. A. N. Baldwin, of Montgomery, was the purchaser.

W. A. Law has been chosen president, and J. C. Evins, cashier, of the Central National Bank, organized at Spartanburg, S. C., with \$100,000 capital.

The Manhattan Investment Association is the name of a new enterprise just organized in Camden, S. C. The corporators are D. E. Hinson and others.

Interest and Dividends.

The C. A. Brusle Hardware Co., of Plaquemine, La., has declared a dividend of 8 per cent. for the year.

Financial Notes.

MR. GEORGE SLOAN has been appointed cashier of the Wilmington (N. C.) Savings & Trust Co.

MR. JOHN HUBNER has resigned as president of the American Banking & Trust Co. at Baltimore, and has been succeeded by James Bond.

A CORRESPONDENT at Brooksville, Ky., writes the MANUFACTURERS' RECORD that he knows of an excellent opportunity afforded to establish a bank in the South,

and can furnish part of the capital, also references.

THE board of directors of the Farmers and Drovers' Bank of Louisville has elected Mr. W. N. Haldeman, president; W. J. Thomas, vice-president, and J. W. Nichols, cashier.

Mississippi River Coal Trade.

The Pittsburgh Post, in a lengthy article on Mississippi river coal trade, states that the dealers of that city are fast losing their monopoly of it, owing to Southern competition. Although West Virginia and Alabama coalfields have been recently developed, they affected the Pittsburgh operators to a great extent. The substance of opinions expressed by leading coal men in a series of interviews sums up as follows:

The Kanawha fields in West Virginia are 225 miles nearer the market than the Monongahela mines. At first this may not seem such a great advantage, but the river men fully realize that it is. The first 100 miles of the Ohio river is the worst stretch between Pittsburgh and Cairo. Its currents are swift; it is filled with shoals and shifting riffles and sandbars. Many bridges obstruct the channel, and are a constant source of danger to the tows of coal that have to pass them. Then again, the water here will often be insufficient to allow of the taking out of a full tow, when the lower river is in good condition.

The losses also are much heavier on the part of the river between Pittsburgh and Point Pleasant than on any 225 miles of river between there and New Orleans. The bottom of the river is strewn with coal and wrecks of coalboats, and represents hundreds of thousands of dollars of Pittsburgh capital. The Virginia operators, too, meet with losses, but they have a comparatively safe river to navigate; and again, they can ship almost the year around, while the Pittsburgh boats are often laid up half the year on account of low water. Another thing that hampers the Pittsburgh operators, as they state, is the price paid for mining. The river miners are now receiving \$2.62 1/2 a hundred bushels, while in some of the competing West Virginia mines it is said the coal is dug for \$2 a hundred.

Good Outlook for Naval Stores.

The dealers in naval stores in Savannah and vicinity regard the year which closed March 30 as a fairly prosperous one for the trade. The depression in the general trade has not materially affected business, although some unfortunate manipulations during the last summer caused considerable dissatisfaction among holders of spirits of turpentine.

The prices for rosin have ruled higher than during the previous year, and the outlook is bright for future business.

The receipts of spirits of turpentine up to the close of the season were 268,108 casks, against 259,711 casks for the preceding season; the exports were 277,472 casks, against 256,889 casks a year ago; the stock on hand is 2270 casks, against 11,634 casks last year. The receipts of rosin for the crop year just ended were 993,164 barrels, against 953,011 barrels for the preceding season; the total shipments were 1,009,758 barrels, against 915,623 barrels the preceding year; the stock on hand is 93,383 barrels, against 109,977 barrels last year. The receipts and shipments for the year show an increase over last year.

MR. H. G. BRAGG, of Charlottesville, Va., has left for Tye River Depot, Va., where he will assume the management of the Nelson Manufacturing Co.'s woolen mill, which will commence operations at once. This mill has been operated successfully for a number of years, but has usually suspended during several months in the year. Mr. Bragg has managed the mills for a considerable time in the past with success.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 156 and 157.]

New Mills Near Weldon, N. C.

Messrs. Brown & Garber, of Washington, D. C., have been awarded contract to erect a knitting-mill building at Roanoke Rapids, near Weldon, N. C., for the United States Industrial Co. This company announced several months ago that it would build this plant, and a large number of hands will be employed. The company's first factory is to be in operation by August 15 for six complete sets of carding, spinning and knitting machines. At once thereafter the company proposes to erect three more of the same capacity. A large cotton factory is also to be erected at Roanoke Rapids at once. Letters can be addressed care of Maxwell & Chanler, 120 Broadway, New York.

Textile Notes.

THE Commercial Club of Waxahachie, Texas, is endeavoring to locate a cotton mill, and the principal business men are interested.

A MOVEMENT has been started at Hendersonville, N. C., for a cotton mill, and a \$150,000 stock company is proposed. Mr. S. V. Pickens is interested.

THE Business Men's League of St. Louis, Mo., has sent a delegation East to interview New England manufacturers relative to establishing cotton mills at St. Louis.

MR. LEROY SPRINGS and others, of Lancaster, S. C., are organizing a company to erect a cotton mill, and about \$75,000 have been subscribed. A 10,000-spindle plant is proposed.

MR. J. C. CARSON, of Spartanburg, S. C., is interested in a cotton-mill project at Shelby, N. C. A \$100,000 company is proposed, and Mr. Carson offers to take \$32,000 of the capital.

THE committee appointed to select a site for the Mills Cotton Mill has chosen one, and work on the plant will soon be commenced. Mr. O. P. Mills, of Greenville, S. C., and others are interested.

MR. F. S. MOSHER, superintendent of the Henrietta Mills, Henrietta, N. C., has returned from New England, where he went to select machinery for the new mill of 20,000 spindles and 600 looms to be run on fine wire, No. 40s.

A COMPANY has been organized at Rutherfordton, N. C., to build a cotton mill, and \$30,000 has been subscribed, to be paid on the instalment plan. Work began on the buildings April 1. D. F. Morrow is one of the directors.

A REPORT from Chattanooga, Tenn., state that a 1500-spindle mill will be started there at once. Boston parties have leased a building from Messrs. Vance & Kirby, and will operate as the W. A. Steers Co., expecting to commence in a month.

A DISPATCH from Raleigh, N. C., dated March 31, states that a 20,000-spindle cotton mill is under contract, to be erected at Burnt Factory, in Rutherfordton county, N. C. It is also said that the Seaboard Air Line will extend its road to pass the mill.

THE fourth annual meeting of the Camden (S. C.) Cotton Co. will be held on the 11th of April. At this meeting the questions of mortgaging the property for the benefit of the enterprise, as well as the issuing of preferred stock, will be discussed.

THE old Red Bank mill property, near Lexington, S. C., that escaped the fire of last December, was sold under a decree of the court last week. The property was bought in by John R. London, of Rock Hill. It is the purpose of Mr. London and Messrs. Allen Jones, W. P. Roof and Robert Hilton to build a large mill on the

Red Bank site, the name of which is to be the "Saxe Gotha" mill, with a capital stock of \$50,000. A commission for the company has been issued.

THE stockholders of the South Side Manufacturing Co., of Winston, N. C., met during the week and elected a board of directors for a \$100,000 cotton factory to be erected at once south of Twin City. H. E. Fries will be chosen president of the company.

IT is proposed at Shreveport, La., to organize the Merchants, Planters & Workingmen's Co-operative Cotton Mill Co. with a capital stock of \$50,000 to erect a plant. Payments for stock are to be made in weekly instalments. Messrs. R. T. Vinson, N. B. Murff and L. M. Carter are interested.

THE plant of the Massachusetts Cotton Mills at Rome, Ga., will include a main building, three stories high, 128x460 feet; engine-house, two stories, 38x403 feet; boiler-house, 43x127 feet; cotton-house, 100x200 feet, and clothhouse, 70x200 feet. Contracts will be awarded this week, and the buildings are to be completed by September 1.

THE stockholders of the Batesburg (S. C.) Cotton Mills held their second annual meeting on April 1 and elected the following directors: E. C. Ridgell, president; T. S. Fox, U. K. Gunter, L. D. Cullum, W. L. Rawl, N. A. Bates, O. J. Harris, T. B. Kernaghan and J. W. Mitchell. The machinery for this plant has been purchased, consisting of 3000 spindles, and the building is ready for equipment as soon as the outfit arrives. Looms and other machinery will be bought in the near future.

THE new Tucapau Mills, near Wellford, S. C., is nearing completion. The building is completed and the shafting and other machinery is now being placed. The wheel plant is said to be the best in the South, and will be completed this month. The dam is twenty-five feet high, 300 feet long, and has a fall of fifty-two feet, and the water is carried from the dam to the mill through 832 feet of steel flue, which is ten feet in diameter. The flume weighs 400,000 pounds. The dam, flume and wheel plant is considered one of the most complete in the South. The mill will be in operation in May.

A DISPATCH from Charlotte, N. C., states that an earnest effort is being made to establish in this city (the leading mill centre of North Carolina, and easily accessible to South Carolina) a first-class textile school, where technical knowledge concerning textile manufactures can be taught. One of its advocates, in speaking of the matter, says: "If we undertake to assume a position of importance in the manufacturing world, we ought to lead in establishing in the South an institution devoted entirely to a knowledge of textile manufactures. It has been found necessary in England and New England to support such schools in order to maintain a competitive position in manufactures, and the South will soon find itself confronted by the same necessity."

THE subscribers to the capital stock of the Cheraw (S. C.) Knitting Mills Co. met on the 25th ult., and the board of corporators appointed by the secretary of state reported that all the stock, \$10,000, had been subscribed. The board then elected the following officers: President, H. W. Finlayson; vice-president, A. L. Evans; secretary and treasurer, L. M. Evans; attorney, Edward McIver; directors, H. P. Duval, H. W. Harrall, M. W. Duval and T. E. Wannamaker. The company will equip the mill at once, and only the latest improved machinery is to be bought. The superintendent will come from one of the best successful mills in the country. While the stock has been taken chiefly in Cheraw, some has been placed in Philadelphia, Baltimore, Richmond and Charleston.

MECHANICAL.

A New Departure in Handling Molasses and Syrups.

Up to within a year or two ago oil was the only liquid handled in tank cars; today the progressive refiners of syrups are rapidly introducing tank cars for the transportation of syrups, molasses and glucose. C. W. Goyer & Co., of Memphis, Tenn., were the first refiners to introduce this method of transporting their liquids, and today their tank cars move to all parts of

both refined as well as crude goods, there being an average of forty-five pounds of syrup to the barrel absorbed by the staves. Again, the expense saved in handling syrups in bulk, as is the case in tank cars, as compared with the cost of handling them in barrels, rolling them in and out of box cars, handling each particular barrel while being emptied, fully justifies the investment in tank cars necessary to transport liquid in this manner.

Goyer & Co.'s cars move from their Memphis refinery to the plantations in the South, bringing in crude Louisiana mo-



TANK-CAR FOR MOLASSES, ETC.

the United States, carrying refined syrups in one direction and glucose in the opposite.

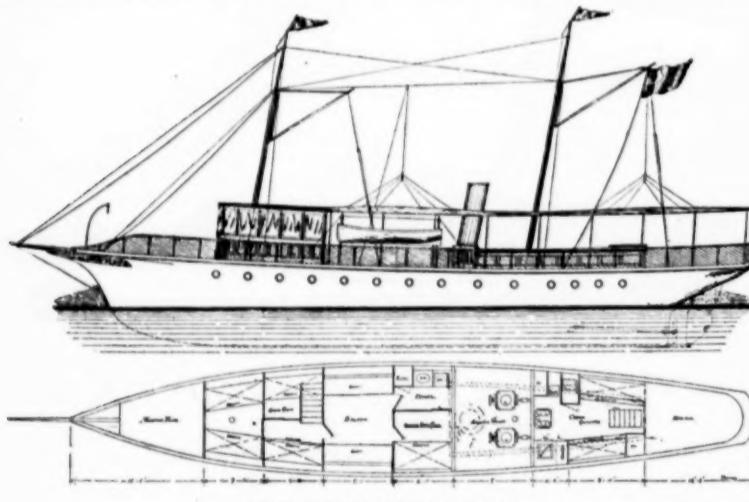
After experimenting over a year with different classes of tank cars, they have recently received from the works of the Memphis Car & Foundry Co. the first of a number of model tank cars. These cars are constructed of the best sheet metal, double riveted and are made to carry 5000 gallons of syrup, which is equivalent to 60,000 pounds, the present M. C. B. standard. The dome and cap at the top of the car are large enough to readily admit a man, the cars being thoroughly washed out after each trip. A double coil of galvanized steam pipe is laid at the

lasses, and out again to the North and West, carrying the same raw and also the refined article, St. Louis, Chicago, Omaha, Philadelphia, New York and other cities all using the product.

The saving to railroads is a large item, inasmuch as they are no longer subjected to numerous claims caused by loss in defective cooperage, handling light loads, because of box cars not being large enough to furnish floor space for heavy loads when in barrels, while tank cars of this size always carry a maximum load.

Twin-Screw Naphtha Launch.

A yacht has been designed for construction at the works of the Gas Engine &



TWIN-SCREW NAPHTHA LAUNCH.

bottom of each tank, live steam being used to heat the syrup when the cars are being unloaded with a view of making it run as freely as possible. An outlet six inches in diameter is used at the bottom of each tank for the purpose of unloading, and to this is fastened a pump with which the car can be emptied within twelve or fifteen minutes.

Until the introduction of tank cars for handling syrups barrels holding from 500 to 600 pounds were used, the use of which entailed a heavy loss to the receivers of

Power Co., Morris Heights, New York city, that will prove a gem of beauty and comfort. It will be a twin-screw naphtha launch, for which class of vessels this establishment is famous. The illustration shows how the boat will appear when completed. An outline description of it is as follows:

Length over all, seventy-eight feet; length of load water line, sixty-four feet six inches; extreme beam, thirteen feet; draft, four feet four inches; freeboard, four feet; head room pilot-house, six feet two inches,

and same in cabin; the frame is to be of oak and planking of white cedar, copper fastened throughout; upper stroke and moldings of quartered oak; pilot-house companionway and skylights of mahogany; decks of edge grain white pine laid to shear of boat caulked and puttied; trunk cabin of mahogany with French plate glass. The staterooms will be finished with raised panels in partitions, doors and ceilings finished bright, with exception of owner's room, which will be in white and gold; toilet-room finished in cherry, natural color, and supplied with marble-top wash-stand, yacht water-closet, dressing-case mirror, towel-racks, etc. The galley will be equipped with four-lid coal stove, hot-water boiler, dish and utensil racks, refrigerator, dresser, etc. The quarters of crew will have accommodations for four persons, although only two men are required to handle the yacht. All fittings and furnishings will be of the finest, including lamps, rails, binnacle, sailing lights, silk draperies, plush-covered hair-filled cushions, Wilton carpets, etc.

The engine equipment will consist of two sixteen horse-power naphtha motors, entirely independent of each other, and a speed of nine to ten miles is anticipated. As illustration shows, yacht will have spars and rigging, deck awnings, and carry two small boats on davits.

The Wainwright Heater.

In the accompanying illustration is shown a view of the Wainwright water-tube feed-water heater. This heater is of the water-tube type; that is to say, the water enters at the bottom of the heater and passes through the tubes and out at the top, while the steam enters at one large opening, shown in the shell, and completely surrounds the tubes. The shape of this heater will appeal to the



THE WAINWRIGHT HEATER.

eye of any experienced designer, the cast-iron heads being formed to resist heavy pressure with the least amount of material. The tube-plates, the position of which is indicated by the inner row of rivets at each end, are set into the shell like tube-plates of any first-class boiler. The plates are of five-eighths-inch stock, and are of the best flanged steel. Into these tube-plates the tubes are placed and set by means of a Dudgeon expander, so that they completely

fill each hole, and then hard brass thimbles are driven as tightly as they will go. The superior character of such a construction is but a sample of the high-grade character of the work throughout the heater, which is built without regard to expense or trouble. The cut herewith presents a heater which was sent to the St. Louis Electric Light & Power Co., and which is now doing good service at this plant. A similar heater one foot shorter is at work in Nashville, Tenn. The maker of this heater also constructs them in cast-iron shells, making a joint right through the centre and casting the tube-plates solidly into the half shell at either end. This form of construction is made possible by the flexibility of the corrugated tubes. These corrugated copper tubes not only, it is claimed, actually increase the amount of heating surface per lineal foot, as compared to smooth tubing, but the character of the surface itself is such as to make the transmission of heat much more rapid than is possible with a perfectly smooth tube. The manufacturer of this heater, the Taunton Locomotive Manufacturing Co., Taunton, Mass., has long since passed the experimental stage, and is prepared to guarantee them in every particular and to the fullest extent.

Three Southern Fairs.

Under the title "Three Southern Fairs—Atlanta 1895, Nashville 1896, Baltimore 1897," the Philadelphia Record reprints the following comment from the *Southern States* magazine:

"Nashville, Tenn., intends to have a great exposition in the fall of 1896. The undertaking is a commendable one. The whole State should take hold and make it a supreme success. Nothing else could so effectively advertise the State. It would give a new impetus to the present immigration and industrial development Tennessee is having. The value of an exposition to the locality in which it is held is incalculable. Its results are far-reaching, and in their wide ramifications touch every business and property interest."

"These expositions are more needed now than they have ever been before. There has never been before so general and widespread an interest in the South, and eagerness for information about the South. A Southern exposition is an epitome of the South. It affords the investigator an opportunity to make in one place a comparative study of the mineral and agricultural resources of all localities. Formerly people had to be dragged to Southern expositions in order that they might see the marvelous wealth of the South and be converted. Now they will eagerly avail themselves of such an opportunity to gain specific knowledge about the South."

"The Tennessee exposition will come opportunely—Atlanta 1895, Nashville 1896, Baltimore 1897. Each should be greater than the one preceding it."

This indicates how much interest is being taken by the great newspapers of the country in the development of the South, which is furnished them through the columns of the *MANUFACTURERS' RECORD* and the *Southern States* magazine.

THE firm of Castner & Curran, of Philadelphia, will in future control the sale of Pocahontas coal, succeeding the Pocahontas Coal Co. Mr. D. H. Matson, the former president of the company, will represent Messrs. Castner & Curran as general manager. It was largely through their energy and enterprise that Pocahontas coal has gained its great reputation.

THE Rutherford (N. C.) Democrat states that Mr. S. B. Tanner, the general manager of the Henrietta, has induced a company from Lowell, Mass., to erect a \$100,000 furniture and wagon factory at Buck Shoals, N. C., work to begin within two or three weeks.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

NEW YORK, April 2.

The market for cotton oil is stronger, and since date of previous report barrelled crude has advanced in price. During the week a sale of choice crude was effected on a 24-cent basis (1000 barrels), while ordinary prime at this date rules at 23 cents. Light supplies of this grade is still a feature of the market, and the few arrivals on offer find ready purchasers. Western needs prove more attractive to the mills, but the recent advance in quotations has checked trading—temporarily, it is believed, however. Crude in bulk at the mills ranges in price from 18 to 21 cents, as to location and size of order. The latter quotation refers to Memphis oil, while the Texas and South-eastern variety has been sold in tank lots at 18 to 19 cents. Summer yellow is in light request, and the major portion of the receipts are consigned directly to local refiners or exporters. According to private advices just received, notwithstanding that exports are comparatively light, the arrivals in Rotterdam are far in excess of the demand. The slow demand for butterine is having a depressing effect on cotton-oil trading. The difficulty is directly traceable to the large arrivals of cream butter on the English markets, and corresponding decrease in butterine imports. Several important shipments were made for Southern Europe at close of the week, while England shows abated interest in off-grade yellow. Twenty-six and a-half cents is asked for good off-grade yellow, with 26 cents bid, while the prime variety has been sold in fairly-sized lots at 26½ cents. It is computed that there are over 2,000,000 gallons of oil stocked in Rotterdam. White oil is on offer at 30 cents, with limited enquiry. The situation may be summarized as exhibiting a tendency on the part of home consumers and exporters to hold off in their purchases, owing to the fortified position of the crushers. Light receipts and correspondingly light trading during the week may be said to characterize all the grades.

The following are current quotations: Crude, prime, 23 to 24 cents; off crude, 21½ to 22 cents; summer yellow, prime, 26 to 26½ cents; off grade, 25 to 25½ cents; butter oil (nominal), 27 to 28 cents; white oil, 30 cents. In the early part of the week sales of summer yellow prime were effected aggregating 1000 barrels at 26½ cents, and 350 barrels of off-grade yellow at prices ranging from 25½ to 26 cents. The improvement in lard values correspondingly strengthens the oil situation.

Cake and Meal.—It is conceded that these products have found their way into numerous locations hitherto unknown to them, and that as a result home consumption has materially increased. But there are yet innumerable districts into which they have not yet penetrated, and are, therefore, practically unknown. Their distribution throughout the vast territories comprised in the stock-feeding area of the country would unquestionably prove equally beneficial to the manufacturer and stock-feeder. The demand for home consumption alone would by far exceed the present supply. Not a few of the English oil millers enhance their business by widely advertising their goods. Unfortunately, there is very much greater reason for the American manufacturer to adopt this course, by reason of the fact that the American agriculturalists as a class are not educated to the advantages derived from the use of cotton cake and meal as feeding-stuffs. Quotations remain unchanged.

Cottonseed-Oil Notes.

SPACE was assigned in Atlanta on the 27th ult. for a cottonseed-oil mill at the Cotton States and International Exposition, which is to illustrate one of the most important industries in the economy of the cotton plant.

AT New Braunfels, Texas, the foundation under the six large oil tanks belonging to the Landa Cotton Oil Co. gave way. All six of the tanks were emptied of their contents. Four of them had a capacity of 10,000 gallons each and the other two 8000 each.

THE Planters' Oil Mill, owned by the citizens of Greenville, Miss., and vicinity, was destroyed by fire on the morning of the 25th ult. Nearly 6000 tons of cottonseed and about \$20,000 worth of oil products were consumed, the total loss being placed at \$170,000, with \$70,000 insurance. Through the efforts of the firemen 2000 tons of cottonseed, worth some \$25,000, have been saved.

MESSRS. HOPKINS, DWIGHT & CO., of New York, report the cottonseed-oil market and its products as quiet, with very little doing, as not much oil is offering. Exporters will not bid over 26 cents for prime summer yellow. There is a better feeling in the market, but not much inquiry. Quotations are as follows: Crude, prime, 23 to 24 cents per gallon; off quality, 21½ to 22 cents; summer yellow, prime, 26 to 26½ cents, and off quality, 25 to 25½ cents.

THE market for cottonseed products in New Orleans is steady, with quotations as follows: Cottonseed, \$6 per ton (2000 pounds) delivered here; cottonseed meal jobbing at depot \$14 25 to \$14 50 per short ton, and \$16 50 to \$17 per long ton for export f. o. b.; cottonseed oil, 20 cents per gallon for strictly prime crude, in bulk 18 to 19 cents, and 23 to 24 cents for refined oil at wholesale or for shipment; oilcake, \$16 50 to \$17 per long ton f. o. b.; foots, 1 to 1½ cents; linters—A, 2 ½ to 2 ¾ cents; B, 2 ½ to 2 ¾ cents; C, 1 ¾ to 2 cents; hulls delivered at 15 to 20 cents per 100 pounds, according to location of mills.

Kentucky's Coal Production.

According to the report of Mine Inspector Norwood the output of the Kentucky mines, bituminous and cannel, for 1894, amounted to 2,952,670 short tons, which was less than for either of the two immediately preceding years and 2534 tons greater than for 1891. Compared with the production for 1893 (3,302,250 tons), the 1894 output shows a net decrease of 349,580 tons. Of the total production of bituminous coal (2,895,166 tons), 47,343 94 tons were used for steam and heat at the mines, and 47,766 16 were converted into coke, leaving 2,800,056 tons as the amount sold. The total value of the bituminous coal sold was \$2,354,525 at the mines, making the average value per ton at the mines .8408 cents. This was .0304 cents less per ton than the average value for 1893.

The maximum number of persons employed at the mines decreased from 11,277 in 1893 to 11,019. The average number of days worked, per separate operation for the entire State, dropped from 161 in 1893 to 139 in 1894.

Notwithstanding the reduction of output, etc., however, there was an increase in the number of operators and in the number of mines operated, the number of operators in 1894 being ninety-seven and of the mines 131.

THE spring shipments of phosphate from the port of Fernandina, Fla., promise to be good. The tracks and elevator are filled with phosphate awaiting shipment. The following steamships were loading on the 29th ult.: Kingsdale, Macedonia and Cundall.

PHOSPHATES.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, April 4.

The market for phosphates continues to drag and business is of the least possible volume. Manufacturers buy only as they need at the moment, and the outlook for any activity is not encouraging. The local and coastwise business in South Carolina is better, and at Charleston the market is reported more active and steady. There is considerable activity in mining sections, and the river companies are all actively engaged. In Florida development among the miners progresses favorably, and the movement in phosphate will be of greater volume for the present month than for March. The tone of the market is steady, with prices unchanged. South Carolina rock is quoted \$3 25 for crude, \$3 75 to \$4 for hot-air-dried and \$6 50 for ground rock, all f. o. b. Charleston. Florida rock is quoted \$3 25 to \$3 50 for river pebble and \$4 65 to \$4 75 for land rock, all f. o. b. Tampa or Punta Gorda. Among the arrivals at this port for the week are noted the schooner C. S. Gliddon from Ashepoo, S. C., with 1650 tons of phosphate rock, and the schooner Grace Andrews from Ashley river, S. C., with 800 tons. The total receipts of phosphate for the month of March were 6335 tons, of which 4272 tons were from South Carolina and 2063 tons from Florida. The local charters reported were the schooners Blanche Hopkins and Grace Andrews to load at Ashley river for Baltimore, and the schooner M. Luella Wood, Beaufort to Baltimore.

FERTILIZER INGREDIENTS.

The market is quiet and the demand for ammoniates light. There has been a light volume of business recorded during the past week, sales being unusually small, except in tankage. Messrs. Thos. H. White & Co., in their circular of the 1st inst., say: "The prices for ammoniates continued to drag the past month. For prompt delivery there has been a very small demand for this season of the year. Many manufacturers at the North appear to have carried over stocks from the fall trade sufficient for their spring supplies, and the Southern buyers are conspicuous by their absence from the market. In face of this depression for prompt stuff there has been a good inquiry for contracts from May 1, forwarded six and twelve months, and four or five prominent packers' six months' products have been taken at \$13 f. o. b. Chicago, and \$10 St. Joe and Omaha. These purchases are credited to prominent Eastern manufacturers, but figuring \$1.70 and 10 cents New York freight, we are inclined to think they are speculative deals, as none of our correspondents would entertain business on this basis."

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	3 25@ \$3 30
Sulphate of ammonia, bone.....	3 20@ —
Nitrate of soda.....	1 75@ —
Hoot meal.....	1 80@ —
Blood.....	1 90@ 1 95
Azotine (beef).....	1 80@ —
Azotine (pork).....	1 80@ —
Tankage (concentrated).....	1 60@ —
Tankage (9 and 20).....	1 60 and 10
Tankage (7 and 30).....	17 00@ 17 50
Fish (dry).....	22 0 60 23 00
Fish (acid).....	15 00@ 15 50

CHARLESTON, S. C., April 2.

The trade in phosphate circles is somewhat more active, coastwise shipments being better and inquiries, both foreign and domestic, more numerous. The local market is without life, the movement to local factories being small to supply immediate need. Among the plants starting up again are the four at Federessa of the Charleston Mining & Manufacturing Co. Prices are \$3 25 crude and \$3 75 hot-air-dried, f. o. b. Charleston. The water shipments for the week were E. G. Hight, 700 tons for Baltimore; H. & J. Blender,

mann, 750 tons for Boothbay; M. J. Lawrence, 600 tons for Richmond; while in port and loading are the Elmiranda, E. L. Cotttingham, Rob Roy, Fannie Reiche. The shipments coastwise since September 1 were 50,166 tons crude and 1305 tons ground rock, against 64,726 tons crude and 300 tons ground rock for same date last year.

Phosphate and Fertilizer Notes.

THE British steamship Para arrived at Brunswick, Ga., last week to load phosphate from the Brunswick Terminal Co.

THE British steamship Cundall arrived at Fernandina, Fla., on the 29th ult. from Boston consigned to A. Talheim for 3300 tons of phosphate.

THE steamship Kingsdale arrived at Fernandina, Fla., on the 28th ult., and will take a cargo of 1835 tons of phosphate for Thullier & Clarke to Hamburg.

THE old Atlantic Phosphate Works, of Charleston, S. C., which were recently bought by the Chicora Fertilizer Co. and thoroughly put in order, started up again last week.

THE steamship Dunmore Head, of the Head Line of steamships, which cleared last week from Brunswick, Ga., for Bremen and Hamburg, had among her cargo 2100 tons of phosphate, valued at \$21,000.

MESSRS. J. F. WHITNEY & CO., of New York, report charters of steamship Rockliff, 1500 tons, Fernandina to Hamburg, and steamship Para, 1160 tons, Brunswick to Memel, both vessels to load phosphate.

MR. K. B. HARVEY, deputy collector of subport of Punta Gorda, Fla., reports the steamship Newcastle, from Havana, entered for loading on the 16th ult. The steamships Hartville and Cordona cleared for Hamburg, the former with 1941 tons of phosphate, and the latter with 2980 tons, both from the Peace River Phosphate Co.

THE big warehouse now being erected at Alexandria, Va., by the Alexandria Chemical & Fertilizing Co. is nearing completion. The work has been delayed by the non-arrival of timber, but it is expected the building will be completed by the middle of April. It is understood that some use will shortly be made of the old American coal-wharf property recently purchased by the chemical company.

THE Brunswick Terminal Co., of Brunswick, Ga., reports the shipments of high-grade Florida phosphate rock through that port for the month of March as follows: 12th, steamship Sir William Armstrong for Stettin, Germany, with 2200 tons, and the steamship Dunmore Head for Hamburg with 2114 tons, making a total of 4314 tons. Previously reported for 1895, 6777 tons, showing a grand total to March 29, inclusive, of 11,091 tons.

THE shipments of phosphate rock from the port of Charleston, S. C., for the week ending March 29 were as follows: Schooners George R. Congdon for New York, 600 tons; Winnie C. Grace for Philadelphia, 700 tons; Isaac T. Campbell for Weymouth, Mass., 95 tons; E. G. Hight for Baltimore, 700 tons, and Maggie J. Lawrence for Richmond, 540 tons. The total shipments since September 1, 1894, aggregate 59,166 tons, against 64,723 tons for the corresponding period last year.

MR. A. TRUBENBACH, representing the Anglo-Continental Guano Works at Ocala, Fla., reports shipments of phosphate by that company for March as follows: Steamship Norlands from Fernandina with 2500 tons and the following cargoes from Tampa: Steamships Marion, 2800 tons; Texas, 2400 tons; Fernlands, 2700 tons; Crete (now loading), 1800 tons, and the Leaconfield from Punta Gorda with 2900 tons. The sailing vessel Suzanne Baulet is to arrive for cargo of river pebble from Punta Gorda. The steamship Cundall is now loading 3300 tons of hard rock at Fernandina.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on pages 156 and 157.]

Lumber Directory.

Readers of the MANUFACTURERS' RECORD who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

LUMBER MARKET REVIEWS.

Baltimore.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, April 1.

The volume of business has been a shade better during the past week in some departments of the lumber industry. The demand is by no means active in any particular line of material, while stocks are ample and generally well assorted as to grades and dimensions. Receipts of yellow pine are fair, and there is some business doing. Box grades and flooring are moving, and there is a fair demand from builders at the moment. The business in white pine is of moderate proportions, and the market is quiet, with prices steady. In hardwoods the local demand is slightly better, and from out of town there is some demand. The general tone, however, is quiet, with few signs of any radical improvement. Planing mills, box factories and other woodworking concerns report trade as slightly improved, while orders are coming to hand more freely.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE.	
5-4x10 No. 2, kiln dried	\$15 50@ 17 50
5-4x12 No. 2, " "	17 50@ 18 50
4-4x10 No. 1, " "	16 50@ 17 50
4-4x12 No. 1, " "	17 00@ 17 50
4-4 narrow edge, No. 1, kiln dried	13 50@ 14 50
4-4 wide edge, " " "	18 00@ 18 50
6-4x10 and 12, " "	23 00@ 24 00
4-4 No. 1 edge flooring, air dried	14 00@ 15 00
4-4 No. 2 edge flooring, " "	11 00@ 12 00
4-4 No. 1 12-inch stock, " "	15 00@ 16 00
4-4 No. 2, " "	12 50@ 13 50
4-4 edge box or rough wide	9 50@ 10 50
4-4 " " (ordin'y widths)	8 50@ 9 50
4-4 " " (narrow)	7 00@ 8 50
4-4 12-inch, " "	10 50@ 11 50
3-4 narrow edge	6 50@ 7 50
3-4 wide	7 00@ 7 50
3-4 10-inch	8 50@ 9 50
Small joists, 2-4-12, 14 and 16 long.	7 50@ 9 00
Large joists, 3-16 long and up.	9 00@ 9 50
Scantlings, 2x3-16 and up.	8 00@ 9 00

WHITE PINE.

1st and 2d clear, 4-4, 5-4, 6-4 and 8-4	48 50@ 50 50
3d clear, 4-4, 5-4, 6-4 and 8-4	43 50@ 44 50
Good edge culls	14 50@ 15 50
Good stock	16 50@ 17 50

CYPRESS.

4-4x6, No. 1	20 50@ 21 50
4-4x6, No. 2	14 00@ 15 00
4-4x6, 16 feet, fencing	11 50@ 12 50
4-4x6, rough	9 50@ 10 50
4-4 rough edge	18 00@ 19 00

Gulf.

4-4 No. 1 and 2	12 00@ 13 00
Gulf, 4-4, Nos. 1 and 2	28 50@ 30 50

Gulf, 6-4, Nos. 1 and 2

6-4, Nos. 1 and 2	20 00@ 30 00
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HARDWOODS.

Walnut	65 00@ 75 00
4-4, Nos. 1 and 2	80 00@ 90 00
5-4, 6-4 and 8-4	85 00@ 95 00
Newell stuff, clear of heart	85 00@ 100 00
Culls	20 00@ 30 00

Oak.

Cabinet, white and red, Southern, plain sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long	39 00@ 33 00
Quartered white, Western, 1 and 2 quality, all figured, 1 inches and up wide, 4-4	53 00@ 55 50
Culls	10 00@ 15 00

Poplar.

Nos. 1 and 2, 5-8	24 00@ 25 00
" 4-4	28 00@ 30 00
Nos. 1 and 2, 6 and 8-4	32 50@ 33 50

Culls	13 00@ 16 00
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SHINGLES.

Cypress, No. 1 hearts, sawed, 6x20	7 50@ 7 75
No. 1 saps, sawed, 6x20	5 50@ 6 50
No. 1 hearts, shaved, 6x20	6 50@ 7 50
No. 1 saps, shaved, 6x20	5 00@ —

LATHS.

White pine	2 65@ 2 70
Spruce	2 15@ 2 25
Cypress	2 15@ 2 25

Norfolk.

[From our own Correspondent.]

NORFOLK, VA., April 1.

The month just closed has developed considerable activity in the lumber trade of the port, and the demand has been generally more pronounced from every quarter. During the past week there has been some very desirable orders filed for prompt and near delivery, and the situation, taken as a whole, is much more satisfactory. The demand for lumber has slowly, but steadily,

increased, and at this juncture manufacturers of kiln-dried North Carolina pine are greatly encouraged by the present features that surround the general market. There is a good inquiry for flooring grades of rough lumber, and for box grades there is a scarcity of 10-inch, as the mills are drawn upon very freely for this particular dimension. Stocks in a general way are scarcely to be called ample for the demand, which is increasing, and the cessation of output in February has left the market short in some grades and dimensions. The reports from the milling sections in the interior of this State and the North Carolina saw-mill sections are all favorable for a good future business, and mills are operating, with a good supply of logs arriving. The planing mills and other woodworking factories around this city are enjoying a fair amount of business; planing mills are especially very active, making good carload shipments, while considerable dressed lumber is being shipped by vessels. There is an ample supply of tonnage, and freights are rather easier, vessels having been chartered during the week at lower figures than quoted. Rates are easy at \$2.25 as an average to New York and sound ports and \$2.50 to \$2.75 to Boston.

Charleston.

[From our own Correspondent.]

CHARLESTON, S. C., April 2.

The demand for lumber is slowly improving and the movement is gradually enlarging in volume, while prices for the various grades and dimensions show no appreciable change. During the past week there has been considerable inquiry for certain grades of lumber, and there has also been a good demand for crossties. Considerable building is going on throughout the city and at suburban points, and there has been an improvement in the demand from builders. The market closes very steady, with prices for all desirable grades of lumber not materially changed. Merchantable lumber is quoted \$1.4 to \$1.6 for city-sawed, \$1.2 to \$1.4 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. Shingles are in good demand, and prices steady at \$5 to \$7 per thousand. The shipments of lumber and its products for the week were 156,000 feet per steamship Algonquin and 330,000 feet per schooner George H. Ames, both for New York. The steamship Volusia took out 35,000 shingles for Philadelphia, and the schooner Nancy Smith cleared with 307,052 feet of lumber for New York. The total clearances of lumber from this port since September 1, 1894, amount to 37,040,710 feet coastwise and 771,125 foreign—37,811,835 feet, against 28,660,937 feet for the corresponding period last year. Lumber freights are steady, with rates not materially changed. A schooner taken in New York on Saturday to load Charleston for New York at \$4.75; Philadelphia, \$4.25, and crossties, 11 to 11 1/2 cents; several charters reported at these figures.

Savannah.

[From our own Correspondent.]

SAVANNAH, GA., April 1.

A moderate volume of business is now in progress in the lumber and timber industry of this port. While there is no very active demand, a steady trade is being done, and prices for all well-manufactured lumber still continue low, with very little prospect of a rise at the moment. The saw mills report a fair amount of business and orders coming in regularly, all the mills being fairly well supplied. At Cordele, Darien and other milling points there is a fair trade progressing, and the lumber and timber trade is reported quite active. The market closes very steady, with quotations as follows: Ordinary sizes, \$1.1 to \$1.2; difficult sizes, \$1.3 to \$1.8; flooring boards, \$1.5 to \$2.2; shipstuffs, \$16.50 to \$20, and sawn

ties, \$10. The clearances during the past week were: Schooners John M. Brown for Perth Amboy, N. J., with 402,263 feet of pitch pine lumber; John F. Kranz for Boston with 375,206 feet of pitch pine, and Margaret A. May for Baltimore with 357,743 feet; steamships Elihu Thompson for Philadelphia with 1365 bundles of shingles; Alleghany with 20,560 feet of lumber and William Crane with 49,408 feet, both for Baltimore; New York steamers carried out 138,560 feet of lumber and 100,000 shingles. Lumber freights continue steady, with rates unchanged. The rates from this and nearby points in Georgia are \$4 to \$5 for a range including Baltimore and Portland, Me. New York charters reported this week are light. A bark, 535 tons, was taken from Brunswick, Ga., to Philadelphia with 44-foot ties at 1 cent, and a bark, 463 tons, Brunswick, Ga., to Philadelphia with oak ties at 20 cents.

Mobile.

[From our own Correspondent.]

MOBILE, ALA., April 1.

The lumber and timber market here is still somewhat depressed, and shippers and timbermen generally are not by any means satisfied with the situation. The lumber and timber, however, is still going out from week to week, while shippers complain that prices are so low that nothing is left after receiving returns. The advices from European markets are not any more encouraging than they have been of late, and stocks are still ample for the demand. Hewn timber when placed upon this market will bring about 12 cents per cubic foot, and 11 to 11 1/2 cents for contract. Sawn timber is dull at 10 to 10 1/2 cents per cubic foot, basis of forty feet average. Sawn logs are dull, with quotations easy. Pine logs are quoted \$5 to \$6 per thousand feet; cypress dull at 6 to 8 cents per cubic foot; poplar is in limited demand at 12 cents per cubic foot. The inquiry for lumber is fair, but shipments are not as large as usual, being mostly in small cargoes for Central America, with some European. Among the shipments during the past week were the bark Rius for Ayr, Scotland, with 18,438 feet of lumber, 31,232 cubic feet of sawn timber and 2194 cubic feet of hewn timber; the bark Feducia cleared for Marcellus with 10,358 feet of lumber and 35,523 cubic feet of sawn timber; the ship America cleared for Greenock, Scotland, with 44,264 cubic feet of sawn timber, 29,444 cubic feet of hewn and 78,849 feet of lumber; the schooner Delta cleared for Manzanillo, Cuba, with 246,000 feet of lumber; the shipments by other vessels amounted to about 400,000 feet. Charters are unchanged and rates steady, with a fair supply of tonnage offering.

Beaumont.

[From our own Correspondent.]

BEAUMONT, TEXAS, March 30.

The general lumber and timber market has shown very little change during the past week, and the demand is by no means active, although orders show a slight increase as compared with the previous week. The manufacturer is already beginning to make up his mind to curtail production, as there has been a long and steady run on bill stuff which has piled up the lumber, and will materially add to stocks on hand. The Journal, in its weekly review of the market, says: "Manufacturers are not expecting anything in the way of an increased demand from dealers, and are shaping their affairs so as to not pile up lumber on the yards. To saw only for the demand it will be necessary to shut down for a portion of each month, and more than one manufacturer has expressed a purpose to pursue this policy." There is a fair demand for heavy timber at somewhat better prices. In fact, some millmen are looking for a better demand for all kinds of railroad timber, as there are a number of new roads

projected and trunk lines about to make extensive repairs. The Long Manufacturing Co. has started up its shingle mill again, the plant having been shut down for some months on account of low prices and other causes. The mill has been running during the week, and is engaged in sawing up the logs that have been in the boom for several months. The company proposes to make some extensive improvements in its plant during the summer, and whatever is decided upon, the work will begin so as to be completed by early fall. The Reliance Lumber Co. is making extensive and needed improvements in its plant. The many additions that have been made to the building as business increased are now being torn away, to be replaced with possibly the largest lumber shed in Southeastern Texas. When these changes are completed the main building will be remodelled and otherwise improved in appearance. The Consolidated Export Lumber Co. is doing a fair business, and is dispatching vessels regularly, two schooners having left for New York and Perth Amboy with full cargoes.

Orange.

[From our own Correspondent.]

ORANGE, TEXAS, March 30.

There has been a fairly active demand for lumber during the past week and the volume of trade holds about the same, showing no material expansion. Orders are coming to hand a shade slower than usual, but shipments are active, and there is no difficulty in getting cars or labor. Yard stocks are yet too large for a paying investment when interest and insurance are concerned. Orders for saw bills from the interior of the State are a little off from last week, though mills are running on full time and have shipped about twice as much square stuff as they did a week ago. The meeting of manufacturers held at Lake Charles, La., last week will be the means of restoring confidence among millmen that despaired of finding a way of putting an end to the downward tendency of prices. It was decided at that meeting that the only way to get prices back was to discontinue an overproduction. The mills that were represented at the meeting all agreed, with one exception, to run four days in each week, and it is thought that this will bring about a more satisfactory order of things. The Sabine river is falling, and at this late date there is little prospect of a cypress rise. On Monday last the dredge-boat Thos. H. Herndon arrived at Sabine Pass, and on Wednesday began work under the contract calling for a 24-foot ship-channel over Sabine Pass bar and up to the town. It has been asserted that deep water would be secured by the present contractors, and from present appearances, and on Major Quin's assurance that there will be twenty-four feet of water over the bar in another year, the public are becoming quite enthusiastic as to the future of trade at this point. The Beaumont Lumber Co. has bought the lumber-yard of W. O. Woodley, located at Voakum. The schooner Senator Sullivan arrived at Sabine Pass last Monday, and is taking on a cargo of lumber for Tampico, Mexico, from the Reliance Lumber Co.

Southern Lumber Notes.

MR. J. A. HARVEY, of Kinston, N. C., wants to correspond with barrel-hoop manufacturers.

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THE shipments of lumber from the port of Brunswick, Ga., for the week ending the 29th ult. were 1,449,000 feet, 131,000 feet of timber and 35,024 feet of crossties.

THE exports of lumber from the port of Jacksonville, Fla., for the month of March were 4,723,000 feet coastwise and 372,062 feet foreign; shingles 220,000 bundles, and crossties 24,000.

SOME of the finest timber runs ever known are coming down the Kentucky river. Most of it so far has been purchased by the High Bridge Lumber Co. and the big mills at Frankfort.

A SPECIAL from Parkersburg, W. Va., states that Judge Jackson passed a decree on the 26th ult. appointing A. H. Winchester, of Buckhannon, permanent receiver of the Holly Lumber Co.

MR. J. J. CUMMINGS, a prominent lumberman of Port Royal, S. C., will make Brunswick his shipping point, and will move his mill, provided he can perfect arrangements for wharf, etc.

AMONG the exports from the port of Pensacola, Fla., for the week ending the 30th ult. were 7079 cubic feet of hewn timber, 3,219,370 feet of sawn timber and 2,384,500 superficial feet of lumber.

AMONG the clearances from the port of Brunswick, Ga., last week was the schooner Anna Pendleton, for Boston, with 450,000 feet of lumber valued at \$8000, shipped by the Hilton-Dodge Lumber Co.

A SPECIAL from Gainsville, Fla., states that Hon. N. J. Herlong, president of the Gainsville, Rocky Point & Micayonay Railroad, proposes to put in an extensive woodworking establishment in the southern portion of the city.

THE receipts of lumber at the port of New Orleans for the week ending the 29th ult. amounted to 2,002,501 feet, and since September 1, 1894, they aggregate 45,836,300 feet, against 45,472,100 feet for the corresponding period last year.

WORK has already begun upon the new woodworking factory at Bamberg, S. C. The company is going extensively into the manufacture of buckets, spokes, shuttles and various kinds of woodwork. A number of orders have already been received.

MR. G. B. HENGE, Atlanta, Ga., representing large furniture manufacturers from Grand Rapids, has written to the mayor of Pensacola, Fla., inquiring about location for plant and inducements to be offered by the city, providing a factory was erected.

AN important deal was closed at Yoakum, Texas, last week, in which the Nona Milling Co. purchased the lumber-yards at that place of W. O. Woodley, with his property adjacent. It is stated that the price paid for the entire property was something like \$10,000.

THE programme for the convention of Texas lumbermen, which meets at Fort Worth, Texas, on the 9th inst., has been arranged. The convention will hold sessions for three days, and will wind up with a trip on the Gulf, Colorado & Santa Fe Railroad and a banquet.

A DISPATCH from Gadsden, Ala., states that contracts have been closed with Messrs. Clark & Howell, of Alexandria, Calhoun county, to furnish 250,000 feet of lumber, and with Messrs. Ora Stewart & Co., to furnish 160,000 feet to be used in the construction of the Dwight cotton mill at Alabama City.

THE planing mill of the Trynham & Ray Manufacturing Co., of Atlanta, Ga., was completely destroyed by fire on the 28th ult. All the sash, doors and blinds stored there, as well as the machinery and building, were destroyed. The total loss will hardly exceed \$20,000, however, as the most valuable class of the manufactured goods made by the firm was not in stock at the time of the

fire. The insurance on the building, stock and machinery will not amount to over \$9000.

ADVICES from Tallahassee, Fla., state that a number of Michigan capitalists are now in correspondence with parties in that city with a view of starting a large furniture factory. If the proper inducements are held out the probabilities are that a large furniture factory will soon be in operation in that city.

THE lumber manufacturers of Alabama at a recent meeting decided to increase the prices of cheaper grades of lumber for Northern markets \$1.25 on the average per 1000 feet, commencing April 1. Arkansas, Mississippi, Louisiana and Texas have already, taken this action in accordance with the recommendation of the Southern Lumbermen's Association.

A SPECIAL from Boyce, La., states that the large planing mill and 3,000,000 feet of lumber owned by Rainey, Hearn & Harris, of Fort Worth, Texas, which is located at Robertsville, Natchitoches parish, was burned on the 24th ult. There was \$6000 insurance on the planing mill and \$7000 on the burned lumber. The saw mill, which has a capacity of 60,000 feet per day, was saved.

IN the United States Court at Parkersburg, W. Va., on the 27th inst., Judge Jackson made a very important decree in the case of Leatherbee et al. vs. the Little Kanawha Lumber Co. He directed the receivers, James M. Olmstead and F. L. Felton, of Boston, and John T. McGraw, of Grafton, to advertise for sale all of the property of the Little Kanawha Lumber Co., including all of its mills, timber, etc. The property is to be sold at private sale and the sale reported to the court.

THE yellow-pine lumber manufacturers of North Alabama, Georgia and Mississippi held a meeting in Birmingham on Friday last to consider the matter of prices. Mr. John L. Kaul, of Hollins, Ala., presided, with Mr. H. Kaup, of Sylacauga, as secretary. The standard classifications, grading and dressing rules of the Southern Lumber Manufacturers' Association were indorsed. The agreement entered into at a former meeting held about sixty days ago, raising the price on piece stuff and boards in the Northern markets, was maintained with some slight changes. About 90 per cent. of the yellow-pine lumber manufacturers of North Alabama, Georgia and Mississippi were either present or represented. The following gentlemen were appointed as a committee on prices: T. H. Johnson, Birmingham; John L. Kaul, Hollins, Ala.; J. D. Hand, Jemison, Ala.; R. Ehrman, Clanton, Ala.; F. H. Lathrop, Riverside, Ala.; J. C. Lanier, Kymulga, Ala.; George H. Gardner, Laurel, Miss.

Iron Markets.

CINCINNATI, March 30.

The past week has witnessed a market fairly satisfactory in volume of business and prices obtained. There are still irregularities in demand, and reports from some sections indicate dullness and depression, while considerable activity is noted in other quarters. Considering the country as a whole, it is evident that the many orders received for small amounts and quick delivery show that the consumption of iron is growing steadily. Buyers, as a rule, are willing to keep their stocks low and depend on the furnaces to ship as needed. Some of the larger consumers have seen fit to cover requirements for remainder of year. The rank and file of the trade have not done so. Should a legitimate advance in prices be established either by reason of the increased cost of coke or better demand, there would be a rush to cover that would clean up stocks and put quotations on a much higher plane.

There is considerable difference in the views of sellers, but most of them are act-

ing very conservatively. A few have put their figures at a point where they cannot hope for orders now, but the majority of producers are willing to book contracts on present basis for delivery during a reasonable time. It is thought best to allow accumulations to be moved, and the fact established that this is a genuine improvement, and not a spurt. It is safe to say that buyers will not lose if they cover their wants for the next four to six months by contracting for standard brands at the low range of values now existing.

We quote for cash f. o. b. Cincinnati:

Southern coke No. 1 foundry.....	\$ 9 50@ \$10 00
Southern coke No. 2 fdry. and No. 1 soft.....	9 00@ 9 00
Hanging Rock coke No. 1.....	11 50@ 12 00
Hanging Rock charcoal No. 1.....	15 00@ 16 50
Tennessee charcoal No. 1.....	13 00@ 14 00
Jackson county stone coal No. 1.....	14 00@ 14 50
Southern coke, gray forge.....	8 25@ 8 50
Southern coke, mottled.....	8 00@ 8 25
Standard Alabama car-wheel.....	15 00@ 16 00
Tennessee car-wheel.....	14 50@ 15 00
Lake Superior car-wheel.....	13 50@ 14 00

West Virginia coke.....

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$10 25@ \$10 50
Southern coke No. 2.....	9 75@ 10 00
Southern coke No. 3.....	9 25@ 9 50
Southern gray forge.....	9 00@ 9 25
Southern charcoal No. 1.....	14 00@ 14 50
Missouri charcoal No. 1.....	12 50@ 13 00
Ohio softeners.....	14 00@ 14 50
Lake Superior car-wheel.....	15 50@ 16 00
Southern car-wheel.....	16 00@ 16 50
Genuine Connellsville coke.....	4 40
West Virginia coke.....	4 40

We quote for cash delivered Boston:

Alabama No. 1 foundry.....	\$12 00@ \$12 25
Alabama No. 2 fdry. and No. 1 soft.....	11 50@ 11 75
Alabama No. 3 fdry. and No. 2 soft.....	11 00@ 11 25
Alabama No. C. C. car-wheel.....	18 50@ 19 00
Strong L. S. coke iron No. 1 foundry.....	13 75@ 14 00
Strong lake ore coke iron No. 2 X.....	12 25@ 12 75
Lake Superior charcoal car-wheel.....	18 50@ 17 00
American-Scotch (Northern) No. 1.....	13 75@ 15 00
Jackson county silvery No. 1.....	17 00@ 17 50

We quote for cash f. o. b. Philadelphia:

Standard Alabama No. 1 X.....	\$11 25@ \$11 50
Standard Alabama No. 2 X.....	10 50@ 10 75
Strong lake ore coke iron No. 1 X.....	12 25@ 12 75
Strong lake ore coke iron No. 2 X.....	13 75@ 14 00
Lake Superior charcoal car-wheel.....	18 50@ 17 00

Standard Alabama C. C. C. W.....

16 75@ 17 25

ROGERS, BROWN & CO.

A Great Dictionary.

The final volume of the Standard Dictionary again directs the attention of men of letters to this notable work of lexicography. A critical study of every department discloses the wonderful scope and thoroughness of this book, and emphasizes the aptness of its title. To collate and arrange this great storehouse of universal knowledge was a triumph for American enterprise, and such a distinct advance in dictionary construction as to win worldwide renown for American philologists. Over \$900,000 were expended before a completed copy was ready for market. This liberal investment and the high character of the work enabled its managers to employ the most expert knowledge and erudition. Being the latest work of the character, it, of course, had the advantage of previous publications. Deficiencies found by distinguished followers of science, literature and art were thus avoided, and the rapid advance in these fields afforded much supplemental material. The Standard has a vocabulary of over 300,000 words, or 75,000 more than accredited to the last great dictionary. Such an addition is portentous of the mighty onward march of science, literature, art and labor in the last decade—in a word, the progress of the human race itself. The book is a striking example of what may be done by judicious condensation and system. The Standard has a vocabulary of over 300,000 words, or 75,000 more than accredited to the last great dictionary. Such an addition is portentous of the mighty onward march of science, literature, art and labor in the last decade—in a word, the progress of the human race itself. The book is a striking example of what may be done by judicious condensation and system. The idea of grouping of related words and terms is not altogether new, but the plan here is carried so far, is so carefully systematized, and the results in the way of clearness of presentation and breadth of scope are so excellent, that practically an original departure is made. The Standard meets the severe test of the professions, and as well that of the average reader. By the latter it is appealed to for spelling, preferred pronunciation, every-day or common meaning. The exact, terse and clear-cut definitions of the Standard will thus please the inquirer. Brevity is observed when it does not affect thoroughness. By no means, however, is encyclopedic treatment discarded when the importance of the subject demands it. In

spelling, the aim was to make the Standard a safe and impartial guide, and this end has been faithfully carried out. Offensive new departures have been avoided, as well as that conservatism which clings blindly to mistaken forms that obviously should be corrected. The matter of correct pronunciation was referred to an advisory committee of fifty persons, composed of representative scholars in all parts of the world. Only after the examination of the opinion of each of these persons was any pronunciation decided upon. In the case of disputed words, by an ingenious system of numbering the preference of every member of the committee is indicated. Over 5000 illustrations are to be found in the two volumes. The tables given are features of great value. In the treatment of synonyms and antonyms a commendable fullness is to be noted. Printers and proof-readers will appreciate the uniform system of compounding which is given. To chronicle the Standard's many excellencies would be a big undertaking. A personal study of the book will develop them more satisfactorily. The Funk & Wagnall Co., of New York city, is the publisher.

TRADE NOTES.

MR. CHARLES M. CASSELL, general manager of the Carolina Buff & Brown Stone Co., whose quarries are at Gulf, N. C., main office, Norfolk, Va., has just furnished forty carloads of this stone for the Granby Street M. E. Church of Norfolk.

A PUBLIC sale of valuable building lots located in Birmingham, Ala., will be held on May 1 by the Elyton Land Co. To parties contemplating investing in a solid Southern city, also a progressive one, fine opportunities will be offered. Manufacturing, dwelling and business sites are included in the property. Easy terms to purchasers (See advertisement)

POULTERER & CO., Bullitt Building, Philadelphia, Pa., have just shipped to the Fit-ton Hard Rock Phosphate Co., of Florida, a 40-ton locomotive for use on its new road. They also sold a short time ago a locomotive to the Condon Lane Boom Co., of West Virginia, and one to the Dry Fork Railroad Co. This firm expects to ship two more locomotives to Florida within the next week or ten days.

MR. W. A. LEARY, of Norfolk, Va., manufacturer of the Champion vertical dry-kiln, has just patented a kiln on a principle, it is said, which has never been tried in this country. It is known as a down draft system. The method is that the air passes downward from the top of the kiln through the bottom outlets, and then into the ventilating flues. By this means a greater output of lumber is gotten, and a higher degree of heat and a moist atmosphere. They have arranged the kiln in such a manner so that heat gravity and condensation work in unison, drying 20,000 feet of lumber in each room. This kiln is particularly adapted for hardwoods and cypress, and it is said to be absolutely impossible to check or warp the lumber contained therein. It is also specially adapted for cypress, and is said to be the best sap-pine drier on the market. Mr. W. G. Galloway, who is well known in the dry kiln field, is associated with Mr. Leary in the patents.

SOME very interesting applications are now being made of the hot-air system being introduced by the F. D. Cummer & Son Co., of Cleveland, Ohio. The company is now erecting a large system for a concern in Canada to be used in drying moss. This moss is used as a bedding for horses and other animals, and it has a very wide use besides in a general way for antiseptic purposes. The discovery of this bed of moss proved a very important find, as when dried it is capable of absorbing fifteen to eighteen times its own weight of moisture and volatile properties from materials with which it is mingled. Another order received by the Cummer Company is from an English concern, which has the reputation of being the largest manufacturer of soda-ash in the world. The order is for one of the largest drying machines, which is to be used in calcining carbonate of soda. A prominent brick and terra-cotta company in England recently installed a Cummer system at its works and a hot air system from Belfast, Ireland, ordered a system for a large concern engaged in the manufacture of brick. The Ironton Brick Co., of Ironton, Ohio, lately placed an order with this company for one of its hot air systems for drying bricks. What has been and is being accomplished with the Cummer systems explains their popularity at home and abroad. The guarantee given by the company is of a most sweeping nature, assuring users an increased efficiency of 100 per cent. with the adoption of the Cummer system.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

*In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Alabama—Furnaces, Mines, etc.—J. W. Adams, of Allentown, Pa., and associates have secured a \$350,000 option on two furnaces at Sheffield, 300 coke ovens at Jasper, the Gamble coal mine near Jasper and 70,000 acres of mineral land in Franklin and Walker counties. W. H. Berlin, of Philadelphia, is interested in the transaction.

Huntsville—Freezer Works.—The Economy Ice Cream Freezer Co. has been organized to erect a factory. S. S. Pleasants is president; James H. Bone, secretary and general manager; S. J. Mayhew, treasurer.

Marion—Water Work.—Works on the water works has been commenced, excavating for the reservoir being now in progress. The reservoir will be 21x40 feet, with a depth of twelve feet, and will hold 100,000 gallons of water.

Mobile—Telephone System.—The Home Telephone Co., already noted, has for president H. Piser; for vice president, Jas. K. Glennon, and for secretary, W. H. Fitzpatrick. Nearly 500 subscribers have been obtained.

Montgomery—Manufacturing.—The secretary of the Commercial and Industrial Association is in correspondence with parties in the West who contemplate establishing a large woodworking industry in Montgomery. He is also corresponding with a shoe factory, a packing-house and several minor industries with a view to moving them to Montgomery.

Newton—Cotton Mill.—Thos. J. Killebrew is interested in the matter of a new cotton mill.

ARKANSAS.

Little Rock—Lumber Company.—The Boeckeler Lumber Co. has been incorporated with a capital of \$15,000 by H. A. Boeckeler, F. D. Hirschberg and E. Boeckeler.

Little Rock—Shoe Company.—Articles of incorporation of the Louis M. Levy Shoe Co. have been filed. The incorporators are Gus M. Gans, L. M. Levy and A. M. Heisman, and the amount of capital stock is \$25,000. The company is to conduct a retail boot and shoe business.

Magazine—Coal and Oil Developments.—J. M. Fuller and others have organized a company to bore for oil and coal.

Texarkana—Machine Shops.—The St. Louis & Southwestern Railway will probably build shops in Texarkana.

Van Buren—Oil Mill.—The Van Buren Compress & Manufacturing Co. contemplates building a cottonseed oil mill.*

FLORIDA.

Crestview—Saw Mill.—H. F. Powell will build a saw mill.*

Gainesville—Woodworking Factory.—N. J. Herlong will establish a woodworking factory to employ fifty to 100 men.

Gainesville—Brick Works.—C. S. Thompson has started brick works.

Jacksonville—Brick Works.—A. R. Van Deveer, of Newark, N. J., will organize a company to establish sand-brick works. Address care of St. John's House, Jacksonville.

St. Augustine—Fire Company.—Heth Canfield is endeavoring to organize a fire company.

Tallahassee—Furniture Factory.—Michigan parties will probably establish a furniture factory.

Tampa—Mercantile.—The Syd B. Sturdivant Co. has been incorporated for mercantile purposes

with a capital stock of \$20,000; John E. Donalson, president; J. S. Bailey, vice-president, and Syd B. Sturdivant, general manager and secretary.

Tampa—Electric light Plant.—The Consumers' Electric Light & Street Railroad Co. has decided to remove its plant to the works on Hillsboro river, six miles from the city, where the company has a fine water-power. Additional turbine wheels and electrical machinery will be added.

Tampa—Oyster Beds.—The Little Bay Oyster Co., of Norfolk, Va., has leased territory below Ballast Point, near Tampa, and will cultivate oysters.

GEORGIA.

Atlanta—Flour, etc.—The Southern Flour & Grain Co. has been given a charter. The company consists of Messrs. G. B. Everett, L. D. Hoppie and J. H. Everett.

Atlanta—Furniture Factory.—Grand Rapids (Mich.) parties will erect a furniture factory to employ 100 hands in the South. G. B. Hengen, of Atlanta, can give information.

Atlanta—Glass Works.—Francis Storm, of Brooklyn, N. Y., has purchased the old Atlanta Glass Works, and will at once fit same for operation. A large number of hands will be employed, the product to be lamp chimneys and shades, tumblers, bottles and other fancy glassware.

Atlanta—Straw-hat Works.—An application has been filed for a charter for the National Straw Hat Works. The incorporators are V. H. Kriogshaber, C. E. Buchanan, D. Kaufman, C. P. Murphy and R. A. Sonn. The capital stock is to be \$100,000, with privilege of increasing to \$50,000.

Augusta—Lithographing Plant.—The company lately noted as projected has organized as the Augusta Lithograph Co. with a capital stock of \$50,000. W. B. Correll, Richard Ward and others are interested. Charter will be applied for.

Cedartown—Iron Mine.—C. F. Miller, R. T. Poole and G. A. Lane will develop an iron mine at Lime Branch.

Columbus—Iron Bridge.—It is proposed to build an iron bridge at the foot of Fourteenth street. The necessary improvements would cost about \$35,000. Address the mayor.

Cuthbert—Water Works.—The city has awarded contract for constructing its water works to Howard, De Long & Co., of Lexington, Ky., at \$33,000.

La Grange—Creamery.—The La Grange Creamery Co. has been organized with O. A. Dunson, president; E. B. Clark, treasurer, and H. C. Butler, secretary, to erect a creamery; capital stock all subscribed.

Newnan—Creamery.—Jas. W. Andrews, of Lebanon, Tenn., is endeavoring to organize a \$5250 company to establish creamery in Newnan.

Quitman—Ice Plant.—S. M. Mathews intends to erect a five-ton ice plant.*

Ringgold—Starch Factory.—A company has been formed to erect a \$6000 starch factory by J. H. Warner, J. H. Anderson, T. L. Brooks, J. H. McLain and W. T. Barkston.

Rome—Cotton Mill.—The Massachusetts Cotton Mills, of Lowell, Mass., noted last week, is to build a plant to contain not less than 30,000 spindles and cost not less than \$600,000.

Rome—Bottling Works.—Responsible parties contemplate the building of bottling works for manufacturing and bottling goods, such as soda water, ale, etc. etc.*

Thomson—Ginnery.—A. H. Curtis will build a ginnery.*

KENTUCKY.

Henderson—Flour Mill.—Al. Dewey, 617 Third street, contemplates erecting a roller flour mill of 125 to 175 barrels capacity.*

Middlesborough—Chewing-gum Factory.—A company has been formed to start a chewing gum factory.

Newport—Telephone System.—The Anthony Electric Co. will establish a telephone system.

Waco—Tiling Factory.—C. L. Searcy will establish a tiling factory; machinery purchased.

LOUISIANA.

Jennings—Rice Culture.—The Riverside Land & Irrigation Co., Limited, of which O. S. Dolby, of Lake Charles, is president; S. J. Johnson, of Jennings, vice-president, and E. F. Rowson, of Jennings, secretary and treasurer, has been incorporated and has purchased about 2000 acres of land six miles north of Jennings, fronting on Bayou Nezque. The company will cultivate rice on an extensive scale, and has a force of graders at work constructing a canal six miles long and fifty feet wide. The capital stock is \$50,000.

New Orleans—Whiskey Distillery.—The Louisiana Distilling Co. has taken charge of the old Louisiana Alcohol Co.'s plant and recently overhauled it, putting it in condition to manufacture whiskey from molasses. John C. Parker and other St.

Louis capitalists are interested. The Southern Rectifying & Redistilling Co. has been organized in connection with the above concern, and is now equipping a plant. S. F. Heaslip is president; John C. Parker, vice-president, and C. Crowley, treasurer. One hundred barrels of molasses will be used daily, and a large number of hands will be employed.

New Orleans—Lumber.—The Hartsville Lumber Co. has been chartered with a capital of \$25,000. The directors are Maurice J. Hart, president; Charles F. Collom, Samuel J. Hart, Charles Menelsohn and Nicholas P. Johnson.

New Orleans—Mining.—John J. McClelland, Chas. Burkhardt, P. H. Lewis, Geo. D. Fisher and others have incorporated the Golden Queen Mining & Milling Co. for mining and treating ores. The capital stock is \$1,000,000.

Pearl River—Saw and Planing Mill.—Wm. Nixon, of North Carolina, will erect a saw mill of 30,000 feet daily capacity, with planing mill and dry-kiln to suit.*

Shreveport—Cotton Mill.—The cotton mill project lately noted is advancing. A \$50,000 stock company is proposed, and its name is to be the Merchants, Planters & Workingmen's Co. operative Cotton Mill Co. Payments will be made on a weekly instalment basis. R. T. Vinson can be addressed.

Vidalia—Cooperage Works.—A company has been organized to establish cooperage works. F. A. Wegar is president; John Recker, treasurer, and George Von Sevareing, secretary, all of Delphos, Ohio.

MARYLAND.

Baltimore—Realty.—The Commercial Real Estate & Commission Co. has been incorporated with a capital of \$50,000, all paid, by W. Moore, H. L. Hedrick, J. J. Hedrick and James Craig.

Baltimore—Vinegar and Yeast Factory.—Henry Wietheger has established a vinegar and yeast factory.

Baltimore—Electrical Works.—The Viaduct Electric Co. is now rebuilding its works at the Relay, including a building 100x40 feet and another 200x60 feet. Employment will be afforded 125 men.

Chestertown—Bridge.—The Kent county commissioners have decided to build a new bridge at Price Mills.

Cumberland—Repair Shops, etc.—The B. & O. R. R. has asked for bids on new roundhouse, repair shop (6000 feet) and water works.

Curtis Bay (P. O. Baltimore)—Soap-powder Factory.—The Diamond Dust Soap Powder Co., of Savannah, Ga., has contracted for the establishment of soap-powder works at Curtis Bay. A contract has been signed for the completion of the works within sixty days. The main building will be of brick, two stories high, forty feet wide and 100 feet long. A second structure of frame, covered with corrugated iron, three stories high, twenty-two feet wide, seventy feet long, will be built. A boiler and engine house will also be erected. The construction of the works is going on under the superintendence of William G. Gischel. Probably seventy-five operatives will be employed. The officials of the company are: L. W. Nelson, president; D. H. Greene, vice-president; W. D. Champion, secretary and treasurer, and H. T. Moore, general manager.

Ellicott City—Paper Mill.—The Mentzel paper mill, which has been idle for a year past, will be put in operation by the Gunpowder Paper Co. Extensive repairs have been completed, and forty hands will be employed.

La Grange—Water Works.—A system of water works is talked of by David Sloan, J. O. Bullock and others.

Salisbury—Broom Factory.—Ernest Woolley contemplates starting a broom factory.*

Salisbury—Telephone Line.—A charter has been granted the Wicomico Telephone Co. for the erection of a telephone line from Salisbury, Quantico, White Haven, Nanticoke, Tyaskin, Bivalve and other villages.

Washington, D. C.—Paper Factory.—Geo. Hill, Jr., has obtained permit to build a paper factory building to cost \$3000.

Washington, D. C.—Patents, etc.—John Wedderburn & Co., have been granted a charter of incorporation in Virginia. The company is organized for the purpose of prosecuting claims against the United States and of patents, etc.; capital stock \$100,000; John Wedderburn, president; Arthur L. Hughes, treasurer, and Wm. L. Ford, secretary.

Weverton—Bottling Works.—W. Mahoney has established bottling works.

MISSISSIPPI.

Duttonville—Saw Mill.—La Crosse (Wis.) parties have purchased timber lands and will erect saw mills of 40,000 feet daily capacity; will also manufacture boxes, etc.

Meridian—Water Works.—An election will be held

on April 24 and 25 to consider issuing \$75,000 of sidewalk-paving bonds and \$30,000 of street-paving bonds. Address the mayor.

MISSOURI.

Kansas City—Car Works.—The Williams Palace Sleeping Car Co. has been organized to manufacture a newly-invented sleeping car, etc.; capital stock to be \$5,000,000. J. Q. A. King, L. Buchanan and others are interested.

Kansas City—Implement Works.—The Fuller-Lee Manufacturing Co., of Winfield, Kans., will remove its implement works to Kansas City.

Kansas City—Telephone System.—B. F. Jones proposes to organize a company to construct telephone system.

Moberly—Fire Company.—Len Kelly, T. A. Bruce and others have formed a hook-and-ladder company.

Seedal—Publishing.—John H. Rice, of Fort Scott, has organized a \$10,000 stock company to publish the Daily Capital.

St. Louis—Plumbing Company.—The Guheen-Strauss Plumbing Co. has been incorporated with a capital stock of \$5000. The incorporators are John Guheen, Gustave Strauss and W. D. Quigley.

St. Louis—Land.—The Libbie Land Co. has been incorporated with a full-paid capital stock of \$500 to buy and sell real estate by W. N. Mathews, J. G. McNair, Bart M. Thompson, Warren L. Clark, Albert T. Terry and Warren Goddard.

St. Louis—Transfer Company.—The Drayage Transfer Co. has been incorporated with \$32,300 capital, fully paid, by Frank F. Hensler, George Davidson, William Brewer and F. J. Ellermann.

St. Louis—Really.—The Tower Realty Co. has been incorporated with a capital stock of \$50,000, fully paid, by Helen P. Sarah L. Martha T. and George F. Tower.

Webb City—Electric-light Plant.—The city has let contract for the erection of an electric-light plant.

NORTH CAROLINA.

Asheboro—Furniture Factory.—P. H. Morris expects to commence work at once on the furniture factory recently noted.*

Buck Shoal—Furniture and Wagon Works.—S. B. Tanner, of Henrietta, has induced a Massachusetts company to build a \$100,000 wagon and furniture factory at Buck Shoal.

Burlington—Coffin Factory.—The Burlington Coffin Co. will enlarge its plant.

Charlotte—Electric-light Plant.—The Charlotte Observer will put in an electric-light plant; contract let.

Charlotte—Cannery.—H. L. & Wilmer Davidson will equip a cannery factory.

Durham—Telephone Works.—The Interstate Telephone & Telegraph Co. (chartered under Maryland laws) has been organized with L. A. Carr, president; Dr. Fahrney, of Frederick, Md., vice-president; J. S. Carr, secretary treasurer, and Edgar L. Miller, of Frederick, Md., general manager. The company will manufacture telephones and construct systems; capital stock \$100,000.

Gastonia—Coffin Factory.—A three-story addition 50x75 feet in size will be built by the Gastonia Coffin Co.

Greensboro—Tobacco Factory.—Lee & Tate's new tobacco factory is to employ from seventy-five to 100 hands; main building to be four stories high, 45x100 feet. Address at High Point, N. C., until June 1.*

Greensboro—Cotton Mill.—Bridgeport (Conn.) parties contemplate establishing a cotton mill at Greensboro.

Hendersonville—Cotton Mill.—It is proposed to organize a company of \$150,000 capital stock to erect a cotton mill. S. V. Pickens can be addressed.

High Point—Cotton Mill.—A report says that a cotton mill will be built.

High Point—Sash and Blind Factory.—The Carolina Manufacturing Co.'s sash and blind factory is being repaired by a new company, and will soon be in operation.

Kinston—Fire Department.—A fire department has been organized by B. W. Canady, Geo. B. Webb and others.

Lexington—Gold Mine.—Dan Stoup, of Springdale, N. C.; Henry Shear, of Oil City, Pa., and F. H. Seybold, of Kensington, Pa., will develop a gold mine forty-four miles from Lexington.

Raleigh—Cannery.—Plans for a cannery are afoot.

Rutherfordton—Cotton Mill.—A company has been formed to erect the cotton mill lately noted; capital stock \$50,000. Address D. F. Morrow.

Shelby—Cotton Mill.—It is proposed to organize a \$100,000 cotton-mill company, and J. C. Carson,

of Spartanburg, S. C., offers to secure \$32,000 of same.

Weldon—Bridge.—A movement has been started for the building of a bridge across Roanoke river.

Weldon—Knitting Mill.—The United Industrial Co. (address care of Maxwell & Chanler, 120 Broadway, New York) has let contract for buildings for its proposed knitting mill previously reported; plant to be built at Roanoke Rapids, near Weldon.

Winston—Cotton Mill.—A company has been organized to build a \$100,000 cotton mill. Address H. E. Fries.

SOUTH CAROLINA.

Alcolia—Knitting Mill.—D. W. Alderman contemplates erecting a knitting mill.

Barnwell—Woodworking Factory.—A woodworking factory to emp'oy twenty five hands has been started. J. M. Jennings is superintendent.

Camden—Cannery.—E. C. Zemp has organized a company to establish a cannery.

Charleston—Clothing Manufactory.—Samuel and Philip Langley are reported as to organize a \$25,000 stock company to establish a manufactory of military clothing.

Lancaster—Cotton Mill.—A stock company is being organized to erect a 10,000 spindle cotton mill, and about \$75,000 have been subscribed. Address Leroy Springs.

Lexington—Cotton Mill.—John R. London, of Rock Hill; Allen Jones, W. P. Roof and Robert Hilton have incorporated the Saxe-Gotha Mill Co. to build a cotton mill; capital stock \$50,000.

Walhalla—Bobbin Factory.—A bobbin and shuttle factory is being built.

Winnsboro—Telephone Line.—A commission for a charter has been issued to the Winnsboro & Ridgeway Telephone Co. with the following corporators: W. D. Douglas, Jas. Q. Davis, E. C. Heins and M. W. Doty. The company will construct a line twelve miles in length.

TENNESSEE.

Chattanooga—Brick Works.—Jno. A. Moon, J. W. Faxon, Chas. Hirron, D. H. Raines and Tomlinson Fort will incorporate the Chattahoochee River Brick Co. for the purpose of manufacturing brick, etc.

Chattanooga—Freezer Works.—J. W. Keithley will start works for manufacturing ice-cream freezers.

Chattanooga—Paper-box Factory.—The Enterprise Paper Box Co. is putting in machinery to double the capacity (15,000 boxes daily) of its factory.

Chattanooga—Cotton Mill.—It is reported that Boston parties have completed arrangements and will at once establish a mill of 1500 spindles; company to be known as the W. A. Steers Co., and plant is to be in operation in a month. Address care of Vance & Kirby.

Chattanooga—Flour Mill.—C. C. Shelton will erect a large flour mill, and has purchased site.

Chattanooga—Electric Plant.—St. Elmo & Lookout Mountain Railway Co. will build a power plant on Lookout mountain; Thos. E. Brown, Jr., of 38 Park Row, engineer.

Harrison—Cigar Factory.—John De Armond will start a cigar factory.

Knoxville—Electric-light Plant.—The city council is entertaining a proposition from a Chicago electrical concern to build an electric-light plant at a cost of \$40,000. It is proposed to locate the plant about eleven miles east of the city on a water-course which will furnish 500 horse-power. The council look favorably upon the plan. Address the mayor.

Memphis—Gas Company.—The Home Gas Co. has been chartered.

Memphis—Improvement.—The Mt. Holly Real Estate & Improvement Co. has been chartered.

Memphis—Manufacturing.—The Anderson Manufacturing Co. has been chartered.

Memphis—Broom Factory.—Henry Freed & Co. have started a broom factory.

TEXAS.

Abilene—Telephone System.—The Abilene Telephone Co. is about to commence constructing its telephone system, as the equipment is now being received.

Abilene—Paint Deposits.—I. C. Frier will develop paint deposits.*

Austin—Electrical Company.—The Austin Electrical Co., capital stock \$5000, has been incorporated by E. B. Fisher, Q. C. Horton and J. E. McGillicuddy to deal in electric fixtures and do all kinds of electrical work.

Cameron—Compress.—Contracts have been signed for the erection of a compress to cost \$30,000.

Clarksville—Compress.—The cotton compress noted last week will be removed to Clarksville by the Paris (Texas) Compress Co.

Corpus Christi—Canal.—The Texas Coast Canal Co., with a capital stock of \$300,000, has filed charter, and the incorporators are John B. Armstrong, of Alice; A. Boschke, of San Antonio, and Wm. De Ryee, of Corpus Christi. This

association is formed for the purpose of improving the Laguna Madre and its tributaries in Texas, and to render the same navigable to steam vessels and other water craft.

Dallas.—Chartered, the F. L. Stevenson Contract Co., capital stock \$20,000, by F. L. Stevenson, T. W. Scollard and D. H. Morrow.

Dallas.—Chartered, the Patheon Immigration Co. by J. A. Hurley, J. W. Boynton and G. A. Tomlinson; capital stock \$10,000.

Edgar—Grist Mill and Gin.—C. W. McClain will erect a cotton gin and grist mill.

Fort Worth.—The Lawn Terrace Co., capital stock \$30,000, has been incorporated by D. T. Bomer, J. E. Bomer and John W. Trevathan.

Galveston—Bridge.—A creosoted bridge will be built across Galveston bay in connection with the Galveston, La. Porte & Houston Railway. J. Waldo, president, of Houston, can be addressed.

Galveston—Improvement Company.—The Winnie Loan & Improvement Co., with a capital stock of \$30,000, has filed its charter. The incorporators are W. C. Teter, W. C. Skinner, J. H. Miller, Leon Blum, John Sealey, Robert H. Gardner, J. W. Byrnes, N. Weekes and Noah Allen.

Hempstead—Bridge.—It is proposed to bridge the Brazos river near Hempstead. Address the county commissioners.

Henrietta—Sugar Factory.—It is probable that a \$250,000 beet-sugar factory will be located.

Hillsboro—Cotton Compress.—The Shippers' Compress & Manufacturing Co. has contracted with W. W. Bierce, of Montgomery, Ala., for a 2000 ton steam and hydraulic compress.

Killeen—Water Works.—Business men have organized a joint stock company with a capital of \$2500; A. W. Dunn, president; S. A. Boase, vice-president; Levi Anderson, secretary; R. I. Godd, assistant secretary; R. M. Cole, treasurer. It is proposed to construct water works, supply to be procured from artesian wells.

La Grange—Electric-light and Water Works.—Baylor & Bradshaw have purchased the city's electric-light and water works.

Paris—Cotton Compress.—The Paris Compress Co. will build a new compress.

Port Lavaca—Cannery.—The Calhoun County Farmers' Institute has inaugurated a movement to build a canning factory for fruits and vegetables and the products of the bays along the Texas coast. For information address L. Seabrook.

Port Lavaca—Canning Factory.—J. D. Morton and others are organizing a company to start a canning factory.

San Antonio—Brewery.—Plans have been made for rebuilding the Lone Star Brewery at an estimated cost of \$250,000.

Temple—Electric-light Plant.—The Temple Electric Light Co. will add considerable new machinery to its plant.

Temple—Water System.—The Temple Water Works Co.'s improvements, noted several months ago, will include new 16-inch main, large reservoirs, new machinery, etc. About \$90,000 will be expended.

Waco—Packing-house.—A movement is afoot to establish a packing house.

Waxahachie—Cotton Mill.—The Commercial Club is endeavoring to locate a cotton mill.

VIRGINIA.

Buena Vista—Knitting Mill.—J. M. Henkle and associates will erect a knitting mill.*

Lawrenceville—Machine Shops.—Work has been commenced on the Atlantic & Danville Railroad's proposed shops.

Marion—Electric-light Plant.—The town contemplates putting in an electric-light plant to be operated by water power; population about 2000. A fifty horse-power water wheel will be used. Address, C. A. Sprinkle, treasurer.

Norfolk—Realty.—The West End Realty Co. has been chartered to deal in real estate anywhere in the United States, establish and maintain water works, gas works, electric plants, sewerage, telegraph and telephone systems. The capital is to be \$10,000. G. M. Serpell is president; Edward Willcox, secretary; N. Burruss, treasurer; G. M. Serpell, N. Burruss, W. W. Galt, W. W. Dugge, C. K. Curtis, A. P. Osborne and W. W. Sale, directors.

Pocahontas—Coke Ovens.—The Southwest Coke Co. has fired forty-eight of its new ovens and will fire the remaining 138 short'ys.

Richmond—Iron Works.—The Belle Isle Iron Works has put 100 puddlers to work.

Richmond—Printing Works, etc.—The J. W. Randolph Co. has been chartered to conduct the book and stationery, publishing, binding and printing business. The capital stock is to be not less than \$20,000 nor more than \$100,000. The offices are: President, Norman V. Randolph; vice-president, J. V. Bidgood; secretary and treasurer, R. Tucker.

Richmond—Paper-box Factory.—A charter has been granted to the Randolph Paper Box Co., whose purpose is to manufacture boxes and druggist specialties. The capital stock is to be not less than \$50,000 nor more than \$100,000; pres-

ident, Norman V. Randolph; vice-president and general manager, A. J. Cavanaugh; secretary and treasurer, George Watt; directors, N. V. Randolph, A. J. Cavanaugh, George Watt, John B. Purcell, J. V. Bidgood and J. H. Randolph.

Roanoke—Machine Works.—The Norfolk & Western Railroad (Fink & Kimball, receivers) has leased the Roanoke Machine Works.

WEST VIRGINIA.

Grafton—Glass Works and Tannery.—It is reported that the Phoenix Glass Co. will erect works to employ 200 men; also a tannery to employ 1500 men is reported.

Martinsburg—Electric-light Plant.—W. E. Tebo has purchased the Martinsburg electric-light plant for \$18,500.

Paw Paw—Tannery.—The U. S. Leather Co. will enlarge its tannery, including erection of rolling-house, beamhouse, new boilers, etc.

Princeton—Coal Mines.—The Mate Creek Consolidated Coal & Land Co. has just been organized with a paid-up capital of \$124,000. The president is John W. Smith, and C. R. McNutt is secretary and treasurer. They have leased 3170 acres of valuable coal lands for development.

Sistersville—Oil Wells, etc.—The Ohio Oil Co., of Pittsburg, Pa., has purchased the Kanawha Oil Co.'s wells and property in the Sistersville field for about \$700,000.

Wheeling.—Chartered, the Pan-handle Oil & Gas Co., with an authorized capital of \$500,000. The incorporators are M. H. Hanna, of Sistersville; S. L. S. Spragg, H. E. Hillman, O. H. Dorsey and J. G. Tomlinson, of Wheeling.

Wheeling—Jewelry Works.—A charter has been issued to the Dillen, Wheat & Hancher Co., with an authorized capital of \$100,000. The company is for the purpose of manufacturing and dealing in jewelry.

Wheeling—Car Works.—McKown & Martin will engage in the manufacture of a patent oil-can.

BURNED.

Atlanta, Ga.—Traynham & Ray's planing mill; loss about \$16,000.

Charlotte, N. C.—The Star Mill ginhouse.

Cumberland, Md.—C. W. Hinze's furniture factory.

Cumberland, Md.—Paul Ritter's brewery; loss \$25,000.

Elizabethton, Va.—Davenport & Son's planing mill, and Edelson, Horne & West's cannery damaged.

Lynchburg, Va.—J. H. Adams, Jr., & Bro.'s planing mill and box factory; B. P. Thoburn's sash factory, and Jno. P. Pettyjohn's dry-kiln; loss \$50,000.

Norfolk, Va.—The Southern Machinery Co.'s works; loss \$15,000.

Robertsville, La.—The planing mill of Rainey, Hearne & Harris (office, Fort Worth).

St. Louis, Mo.—The Nephana & Klein Paint Co.'s dryhouse; loss \$3000.

BUILDING NOTES.

Apalachicola, Fla.—J. E. Grady & Co. will erect a business house thirty two feet wide and 100 feet long.

Atlanta, Ga.—Hotels.—The East Alabama Land Co. has determined to expend \$500,000 on a 250-room hotel and other buildings at the exposition grounds. John H. Seals will build a hotel of 120 rooms, four stories high, 157x200 feet, and to have steam or hot-water heat, baths and all modern improvements. Frederic Ausfield has prepared plans. Details are not fully settled yet.

Baltimore, Md.—Courthouse.—The temporary courthouse recently noted has been decided upon, and \$25,000 has been appropriated. Bids will be opened April 18. Address J. Theo. Oster, building inspector.

Batesburg, S. C.—Hotel.—It is said that a large hotel will be built on W. P. Cullum's farm, near Batesburg.

Berryville, Va.—Almshouse.—The county supervisors have let contract to A. J. Kimmell for a frame building.

Birmingham, Ala.—Clubhouse.—The Southern Club will build a new house.

Charlottesville, Va.—Bank Building.—The People's National Bank will erect a building.

Charlottesville, Va.—Courthouse.—The board of supervisors at its last meeting talked of building a new courthouse and appointed a committee to investigate. Address John M. White.

Charlottesville, Va.—Church.—The Charlottesville Land Co. has donated site for a Methodist church.

Chattanooga, Tenn.—Hotel.—Contract for re-building the Southern Hotel has been let to John Rea at \$29,800.

Chattanooga, Tenn.—Hospital.—The city will

borrow \$20,000 to complete a hospital. Address the mayor.

Cordele, Ga.—J. P. Heard, of Vienna, will erect a 50x80 foot brick building in Cordele.

Corsicana, Texas—Church.—Plans and specifications for the new Methodist church have been adopted by the committee having the matter in charge, and the contract will be let at once. The proposed church is to cost \$20,000.

Cumberland, Md.—Residences.—Herman Schneider has prepared plans for a store and office building, to be 40x50 feet, three stories, have beveled glass, speaking tubes, electric lighting, gas fixtures, dumb-waiter, steam heating, bathroom outfit, plumbing, etc.; cost \$6000. Same architect has prepared plans for a residence for J. W. Hubbard, to be 40x60 feet in size, three stories, built of brick, have architectural and ornamental iron-work, stained and beveled glass, electric lighting, gas fixtures, bathroom outfit, etc.; cost \$12,000.

Cumberland, Md.—Roundhouse, etc.—The Baltimore & Ohio Railroad has asked for bids on its proposed new roundhouse, water works and repair shop; roundhouse to accommodate forty-seven locomotives.

Eagle Lake, Texas—Store.—J. W. McCarthy will build a storehouse to cost \$6000.

Fort Worth, Texas.—Humphreys & Bewley have let contract for a three-story brick building to cost \$17,000.

Galveston, Texas—Bank Building.—Proposed for erecting three-story fire-proof bank and office building will be opened April 22; drawings and specifications now completed. Address N. J. Clayton & Co., architects.

Kansas City, Mo.—Dwelling.—Wm. M. Reid will erect a \$10,000 dwelling; plans completed.

Kansas City, Mo.—Storehouses.—The W. J. Lemp Brewing Co. will erect two brick beer depots to cost \$6000 and \$4000.

Kansas City, Mo.—Residences.—Kirk B. Armour has purchased site for \$20,000 on which to erect a residence costing from \$60,000 to \$75,000. Dr. J. D. Griffith will build a \$30,000 residence.

Knoxville, Tenn.—Association Building.—The Y. M. C. A. is negotiating for the erection of a new building.

Llano, Texas—Jail.—Contract for erecting new jail has been let to the Pauly Jail Building Co., of St. Louis, at \$11,500.

Louisville, Ky.—Residences, etc.—C. S. Kellar has prepared plans for a residence for L. Kellar, to have iron and marble mantels, plate and stained glass, speaking tubes, electric bells, etc.; cost \$5000. Same architect has prepared plans for a residence for E. Walker, to have marble mantels, plate and stained glass, blinds, electric bells, gas fixtures, etc.; cost \$3500. Henry Diel has prepared plans for residence for R. C. Wahyene, to have galvanized iron cornice, marble mantels, plate and stained glass, speaking tubes, electric bells, etc.; cost \$5000. Fred Erhart has prepared plans for a residence for Miss Anna Monahan, to have iron mantels, plate and stained glass, blinds, electric bells, hot-water heating, bathroom outfit, etc.; cost \$5000.

Milton, Fla.—Hall.—The Knights of Pythias have let contract to R. E. Peterson at \$3450 for the erection of a hall.

New Orleans, La.—Clubhouse.—The Harmony Club will erect a new house to cost \$100,000.

New Orleans—Residence.—J. W. Castles will build a \$9000 frame residence; J. E. Glenny, a \$10,000 residence, and L. M. Howell, a \$7250 residence.

New Orleans, La.—Store.—J. A. Harral & Son have obtained permit to build a three story brick store to cost \$6000.

New Orleans, La.—Clubhouse.—The Pickwick Club is offering a prize of \$500 for the best plans for its proposed clubhouse; building to be four stories high, 57x127 feet, and cost \$60,000 complete; winner of prize to be employed as architect. Address secretary of the club.

Ocala, Fla.—Depot.—The Florida Southern Railroad has purchased site for a new depot.

ing for G Schuchmann, to be 109,650 feet in size, three stories and basement, fire proof, have iron beams, columns, shutters and window guards, blinds, electric bells and lighting, steam heating, etc.; cost \$25,000.

St. Louis, Mo.—Dwellings.—Building permits have been issued to C. A. Rosebrough for a two- and a half story dwelling to cost \$5000; to William Sippy for two two-story stores to cost \$13,500; and to John Devlin for six flats to cost \$10,000.

St. Louis, Mo.—Dwellings—Building permits have been issued to C. R. H. Davis for dwelling to cost \$3000; Thomas C. Higgins, dwelling, \$10,000; J. H. Freudenstein, dwelling, \$6000; H. C. Pollman, dwelling, \$5000.

Tampa, Fla.—Dept.—The Southern Florida Railway Co. will build a new freight office and warehouse, two stories high, of brick, 50x100 feet.

Van Alstyne, Texas Residence.—Jos. Greer has let contract for the erection of a large two story residence.

Victoria, Texas—Hotel.—A company has been formed to build a \$30,000 hotel. Address care of Manager William of the Mut.

Vienna, Ga.—Jail.—Contract has been awarded for the erection of a jail with steel cells, etc.; J. D. Hargrove, ordinary.

Washington, D. C.—Annex.—The American Trust & Security Co.'s new annex is to cost \$80,000. Barry Simpson & J. G. Hall are the architects.

Washington, D. C.—Dwellings.—Building permits have been issued to Thos H. Hart for a \$12,000 apartment house, and to M. F. Thompson for a \$7000 dwelling.

Washington, D. C.—Dwelling.—Building permit has been issued to Charles Mades for a store and residence to cost \$10,000.

Washington, D. C.—Dwellings.—Building permits have been issued to David Dunlop to erect seven two-story and one three story brick buildings to cost \$15,000; Mrs. I. Lennin, to erect one four-story and cellar brick dwelling to cost \$5500; Mrs. A. B. B. M. Craig, two three story brick dwellings to cost \$9000; Howard B. Bell, two three-story and cellar brick buildings to cost \$12,000.

West Palm Beach, Fla.—Hotel.—A company is being organized to erect a 300-room hotel.

Wrightsville, Ga.—Courthouse.—Proposals will be received until May 20 for erecting courthouse for Johnson county. Plans and specification now on exhibition in Atlanta, Macon, Augusta and Savannah. Address J. M. Hightower, ordinary.

Wylleville, Va.—Opera-house.—The Wylleville Opera house Co. will be incorporated to erect an opera house; capital stock \$10,000; building to be of brick, three stories high, and cost about \$6000. W. H. Ribble, Jr., president.

Yoakum, Texas.—A. W. Fueyer will build two two story brick dwellings.

RAILROAD CONSTRUCTION.

RAILROADS.

Allard, Tenn.—Surveys are now being made for a road to extend through Fentress county to a connection with the Cincinnati Southern at Glen Mary station. It is intended to traverse the coal region in the county. The Crawford Coal Co., of Terre Haute, Ind., is reported to be interested.

Anderson, S. C.—J. L. Tribble.—One of the directors in the Blue Ridge Railroad proposed through Rabun Gap, advises the MANUFACTURERS' RECORD that the people of Anderson will probably take \$50,000 in stock to build the road if it forms a part of Albert E. Boone's proposed Knoxville & Port Royal system. P. K. McCullum is president.

Bonham, Texas.—An effort is being made to organize a company to build a road to Celeste, in Hunt county.

Charleston, W. Va.—The Guyandotte & Atlantic Company has been incorporated by Francis M. Price, John D. Miller, John E. McElroy, Franklin R. Magee and Earl A. Merrill, all of New York city. The principal office is to be in Charleston, W. Va. The road is to begin at a point on the Ohio river, near the mouth of Four Pole creek, in Wayne county, and run up Four Pole creek and on to the Guyandotte river, up the Guyandotte river and on to Bluestone river, down Bluestone river to New river, to a point on the line between the States of West Virginia and Virginia. A line of this railroad will also run from the mouth of Big Bluff creek up said creek and by the most practicable route to a point at or near Pineville, on Guyandotte river, in Wyoming county.

Chattanooga, Tenn.—It is stated that the plan to build an inclined cable road up Lookout mountain has resulted in the formation of the St. Elmo & Lookout Mountain Railway Co. with \$100,000 capital. William H. Steere, of Chattanooga, is to be manager and Thomas E. Brown, Jr., of 38 Park Row, New York, engineer. The road will be 4000 feet long.

Chattanooga, Tenn.—M. M. Henderson, it is stated, has interested a syndicate in constructing an inclined cable road up Lookout mountain at a cost of \$75,000. The road is to be laid with 50-pound steel rails. [This is a different enterprise from the other cable road mentioned in this column.—ED.]

Clarksburg, W. Va.—The West Virginia Short Line Company has elected Wm. Jackson, president; J. H. Allen, vice president; T. G. Brady, secretary, and J. Philip Clifford, attorney. The road will run from Clarksburg to Sardis by way of Ten-Mile creek, and thence to the Ohio river, either at Sistersville or New Martinsville.

Crossville, Tenn.—Prest. Jere Baxter, of the Tennessee Central, has contracted with Tubman & Co., of Lexington, Ky., to grade and complete the line from Monterey to Crossville. Newton & Porter, of Cincinnati, will complete the road from Fall Creek to Crossville, in Roane county.

Fort Smith, Ark.—The Kansas City, Pittsburg & Gulf has decided to include Fort Smith in its route, and Contractor Bernard Corrigan is about to begin work at that point.

Galveston, Texas.—The Galveston, La Porte & Houston and the Galveston & Western companies are negotiating to combine and build a bridge across Galveston bay. Hon. Walter Gresham and J. W. Do is interested.

Galveston, Texas.—Director T. P. Nichols, of the Galveston, Virginia Point & Port Bolivar Terminal road, states that it will be built as soon as Congress gives permission to build a bridge across Galveston bay.

Gonzales, Texas.—The residents of Gonzales county are endeavoring to raise a fund to build a road to a connection with the Missouri, Kansas & Texas at Llano, Texas. G. N. D. Worth and Jas. F. Miller are interested.

Hempstead, Texas.—A. G. Lipscomb and R. E. Hannan are members of a committee agitating the extension of the Texas Western road to Hempstead.

Jacksonville, Fla.—The Jacksonville, St. Augustine & Indian River Co. will build several short branches, it is announced, from the banks of the Biscayne Bay Canal, now being excavated, to the farming districts in the interior of the State. J. E. Ingraham, at St. Augustine, may be addressed.

Kansas City, Mo.—The Argentine branch of the Union Terminal Railway has been completed. The construction of this road finishes a system which encircles the city. The system has about sixty miles of track, intercepting railways running into Kansas City. It has cost over \$4,000,000.

Knoxville, Tenn.—Engineer Allison has started to make surveys of the proposed belt line around Knoxville, which Albert E. Boone is promoting.

Little Rock, Ark.—W. F. McCombs, J. H. Pryor, W. M. Whitlow and others have organized the Hamburg & Southern Railway Co., which proposes to build a road from Hamburg to the Louisiana line, sixteen miles. L. N. Polk is engineer.

Lumberton, N. C.—The Lumberton & Lumber River Railway Co. has secured the use of State convicts to grade the road, which is to be about twenty five miles long, extending from Lumberton to Hub Station, on the Atlantic coast. Robeson county will take \$20,000 in bonds of the line, and it is expected that construction will begin in September. McNeill & McLean are interested.

Montgomery, Ala.—S. D. Bloch, promoter of the proposed Montgomery, Hayneville & Camden road, is securing financial aid for the project in Lowndes county, Ala.

Prattville, Ala.—The proposed road from Coosa, on the Louisville & Nashville, to Prattville is to be promoted by a company incorporated as the Montgomery & Prattville Railroad Co., which includes Daniel Pratt, of Prattville, and R. H. Ingram, of Louisville, Ky.

Selmer, Tenn.—George H. Bunch, of the Selmer & Tennessee River road, advises the MANUFACTURERS' RECORD that work is to begin on the road on April 8. Supplies have not as yet been purchased.*

Tazewell, Va.—The line of road being surveyed along Big Sandy river, it is said, is to be built by Northwestern lumber people owning timber lands in Tazewell county, Va., and McDowell county, W. Va. D. G. Sayers, of Sayersville, Va., and J. G. Watts, of Tazewell, are interested.

Tuscumbia, Ala.—The Louisville & Nashville, it is reported, has secured right of way for its proposed extension from Sheffield to Tuscumbia.

Electric Railways.

Anniston, Ala.—The electric street railway being promoted by Howard W. Sexton, it is stated, is to be built at once.

Baltimore, Md.—The City Passenger Railway Co. has received permission to extend its trolley lines in the northeastern section of the city. Walter B. Franklin is president.

Baltimore, Md.—The Edmond Avenue, Catonsville & Ellicott City section of the Washington & Baltimore Boulevard will be allowed to enter Baltimore by the city council. Construction work is to begin at once. John Hubner is one of the directors.

Baltimore, Md.—S. J. Martenet has secured the franchise to build an electric line along Jerusalem turnpike from the northern limit of the city. Three miles of double track and nine miles of single track, it is stated, are to be laid by September.

Brunswick, Ga.—W. A. Jeter has asked for a franchise to build an electric street railway in Brunswick.

Charleston, S. C.—It is reported that the City Railway Co. is to sell its lines to a company which will rebuild them for electric motors. John S. Riggs is president.

Charlottesville, Va.—The Piedmont Construction & Improvement Co. has decided to rebuild the Fry's Spring street car line for the use of electric motors. T. O. Tracy is general manager.

Danville, Va.—Arrangements are being completed to extend the Danville electric railway into the suburbs. Messrs. Berkeley and Harrison are interested.

Lake Charles, La.—A franchise has been granted a company to construct a trolley line in the city.

New Orleans, La.—The St. Charles Street Railway Co. has awarded contracts for electric motors for its line, and for its power-house equipment. Track is now being laid on its route. The Orleans Street Railway Co. has also given out contracts for equipment of its proposed trolley lines

Norfolk, Va.—The syndicate which has purchased the Portsmouth street railway will issue bonds to convert it into a trolley line. J. Finney and J. K. Siegfried, of Pottsville, Pa., are interested. The extensions of the road will make it about fifteen miles long, including branches to Port Norfolk and West Norfolk.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bakery Machinery.—Thos. C. Pole, Room 50, Atlantic Building, Washington, D. C., wants dough rolls and mixers.

Bath Outfit.—The Monroe Athletic Club wants a small and inexpensive bath outfit and three porcelain-lined tubs, etc. Address Chas. G. Madison, Monroe, Ia.

Belting—A. H. Curtis, Thomson, Ga., wants cotton belting for cotton carriers.

Belting.—The United Industrial Co., 120 Broadway, N. Y., will buy belting.

Boiler and Engine.—Baldwin & Co. & Geis, Dawson, Ga., want to buy a return-tubular boiler, forty to fifty horse-power, and good engine, thirty five to forty horse-power, and want price delivered at Dawson.

Boiler and Engine.—P. H. Morris, Asheboro, N. C., will want boiler and engine.

Boiler and Engine.—Lea & Tate, High Point, N. C., want a fifteen or twenty horse-power engine and a thirty or forty horse power boiler.

Boilers and Engine.—H. F. Powell, Crestview, Fla., wants two thirty horse power boilers, steam pipe c. re thirty feet, and one forty horse-power engine, side-crane, off bearing, for main shaft, and one small pulley on shaft.

Boiler and Heater.—The Dublin Compress Co., Dublin, Texas, will buy two boilers of about 300 horse-power and heater for same.

Boiler Supplies.—Wm. A. Heffernan, Lynchburg, Va., wants scale-removing compound for steam boilers.

Bottling Plant.—The Mountain Spring Bottling Works, Knoxville, Md., wants bottle washer, tinster, bottles, etc.

Bottling Works.—Wanted, information, catalogues and prices of machinery for manufacturing and bottling soda water, ales, etc. Address P. P. O. Box 181, Rome, Ga.

Broom Machinery.—Ernest Woolley, Salisbury, Md., wants prices on broom machinery.

Card Manufacturers.—T. T. McWhirter, 213 Four and a half street N. W., Washington, D. C., wants to correspond with manufacturers of embossed and engraved cards.

Canning Machinery.—Canning machinery will be wanted. Address L. Seabrook, Port Lavaca, Texas.

Corn Mill.—The Lampasas Mill & Gin Co., Lampasas, Texas, wants a corn shucker and churn to shell and crush with shuck on.

Cotton Compress.—H. T. Wise, Houston, Texas, wants prices on a Morse cotton compress; second-hand if in good order and reasonable in price would answer.

Cotton Gin.—The Lampasas Mill & Gin Co., Lampasas, Texas, wants a cotton-gin press and sucker for loading cotton.

Cotton Mill.—N. D. Wood & Son, Prosperity, N.

C., want to bargain for machinery to manufacture 1000 pounds of cotton yarn daily.

Cotton Mill.—Geo. T. Parkhouse, Yoakum, Texas, wants full information regarding cotton mill, estimate on equipment of machinery, etc.

Curling Machinery.—The Mobile & Honduras Manufacturing Co., Mobile, Ala., wants to correspond with manufacturers of machinery for curling hair or fibre.

Dry kiln.—Wm. Nixon, of North Carolina, will buy dry kiln outfit for lumber. Address in care J. S. Blackburn, Blackburn, Miss.

Edger.—Haydon & Goss, Warren, Ark., want a small three saw inserted-tooth edger, wheel-set.

Electric Lighting.—Proposals for lighting the city of Vicksburg, Miss., for three years and five years will be opened on April 15. Address W. L. Trowbridge, mayor.

Electric-light Outfit.—The Monroe Athletic Club wants electric-light outfit, except current. Address Chas. G. Madison, Monroe, La.

Electric-light Plant.—Wanted, prices on an electric light plant for a town of about 1200 inhabitants; about 500 or 600 incandescent and twenty-five arc lights complete, except power; state how much power will be required; new or second-hand. Address Chas. W. Sprinkle, Pensboro, W. Va.

Engine.—The Warren Land & Lumber Co., Warren, Texas, wants a high-speed automatic engine, 12 to 16 inch cylinder, second-hand.

Engine.—W. B. Ellis, New Berne, N. C., wants a forty horse-power stationary steam engine; quote lowest cash price.

Flour Mill.—Al Dewey, 617 Third street, Henderson, Ky., wants prices on flour mill of 125 barrels capacity.

Flour-mill Machinery.—A. L. Pippin, Elizabeth, Miss., wants a small stem wheat bat, about 20 to 30-ton boat, w. eight or ten horse-power outfit; also wants estimates on hog chins and shaft for wheat.

Furniture Machinery.—P. H. Morris, Asheboro, N. C., will want machinery for manufacturing furniture.

Gas Engine.—The Farmers' Oil Mills, Tarboro, N. C., contemplates buying a gas or vapor marine engine, and wishes cuts and description from manufacturers and dealers. Address E. V. Zoeller, secretary.

Glass works Machinery.—Wm. A. Heffernan, Lynchburg, Va., wants second hand glass-beveling machinery; also process for chipping glass.

Gymnasium Outfit.—The Monroe Athletic Club wants gymnasium equipment. Address Chas. G. Madison, Monroe, La.

Ice Machine.—S. M. Mathews, Quitman, Ga., wants a five or six ton ice machine (without boiler and distilling apparatus).

Implements.—De Witt Owen, Athens, Texas, wants prices on agricultural implements, such as sod plow, clod pulverizer and cultivators.

Interior Finish.—Proposals will be opened April 30 for completing interior finish of United States postoffice building at Columbus, Miss.; Chas. E. Kemper, acting supervising architect, Washington, D. C. (See advertisement in MANUFACTURERS' RECORD.)

Knitting Machinery.—J. M. Henkle, Buena Vista, Va., wants information and prices on knitting machinery.

Laundry Machinery.—L. W. Wiggins, Marietta, Ga., want machinery for a steam laundry

Lumber-mill Machinery.—Wm. Nixon, of North Carolina, will buy machinery for planing and sawing. Address in care J. S. Blackburn, Blackburn, Miss.

Oil Mill.—The Van Buren Compress & Manufacturing Co., Van Buren, Ark., wants to correspond with manufacturers of cottonseed-oil mill equipments.

Oil Mill.—The Home Oil Mill, Greer Depot, S. C., wants complete outfit for a 20 ton per twenty-four hours capacity oil mill.

Mining Machinery.—I. C. Frier, Abilene, Texas, wants full information and prices on machinery for mining paint ore.

Mining Machinery.—The Sloss Iron & Steel Co., Birmingham, Ala., expects to buy air compressor with capacity to run nine air drills on hard red ore, nine air drills and picker belt for cleansing coal of slate, etc.

Pipe.—The United Industrial Co., 120 Broadway, N. Y., will buy steam and water pipe.

Plumbing.—Proposals for plumbing in the custom-house and postoffice building at Clarksville, W. Va., will be opened April 2. Address Chas. E. Kemper, acting supervising architect, Washington, D. C. (See advertisement in MANUFACTURERS' RECORD).

Power Plant.—See "flour-mill machinery."

Pulleys, etc.—The United Industrial Co., 120 Broadway, N. Y., will buy pulleys and shafting.

Pump.—The Louisville Coal & Coke Co., Goodwill, W. Va., has a well 400 feet deep, bored first twenty-four feet with a 10-inch bit, next seventy-

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six with an eight-inch and remaining distance with a six-inch, and wants to purchase for this well a deep well pump that will raise to an elevation of sixty five feet above the well from 15,000 to 20,000 gallons of water in four or five hours, and it will be necessary for the water to be taken from sixty-five to seventy-five feet below the surface. The company also wants bids for boring another well similar to the above. Address Justus Collins, vice president.

Pump.—Lea & Tate, High Point, N. C., want a steam pump (hydraulic).

Railroad Equipment.—The Selmer & Tennessee River Valley Railway Co. will want one 35-ton mogul freight locomotive and one 30-ton passenger locomotive, one combination mail, baggage and express car, two passenger coaches, several flat box and stock cars, about 1500 tons 56-pound T steel rails with fastenings, etc.; quote cash prices. Address Geo. H. Bunch, purchasing agent, Memphis, Tenn.

Rails.—The Heyser Lumber Co., W. J. Heyser, manager, Chattanooga, Tenn., wants to buy 2000 feet of eight or 10-pound T iron rails, second-hand.

Rails and Locomotive.—Larkin B. Leslie & Co., Sandersville, Miss., are in the market for two miles of 20 to 25-pound rails and a 10-ton second-hand Shay logging locomotive.

Riggers' Outfit, etc.—R. H. Hood, Twelfth and F streets N. W., Washington, D. C., is in the market for about \$1500 worth of ropes, blocks, tackle and riggers' outfit.

Roofing.—P. H. Morris, Asheboro, N. C., will want metal roofing.

Roofing, etc.—A. H. Curtis, Thomson, Ga., wants corrugated iron roofing and siding.

Saw Mill.—Wanted, a portable saw mill and engine; would buy or rent. Address, with particulars, W. B. Montgomery, Bradshaw, Baltimore county, Maryland.

Saw Mill.—H. F. Powell, Crestview, Fla., wants complete equipment for saw mill, including pulleys, belting, belt tightener, rope feed or rock and pinion, two inserted-teeth Disston 50 inch saws, 100 feet of carriage well bolted, eighty feet track, iron, etc.

Saw-mill Machinery.—H. Blackman, Midland City, Ala., wants prices and terms on saw-mill machinery.

Steam Launch.—The Monroe Athletic Club wants a steam launch of about four horse-power, from thirty to forty feet long. Address Chas. G. Madison, Monroe, La.

Sugar Mills.—De Witt Owen, Athens, Texas, wants prices on sugar or cane mills, evaporators, etc.

Tank.—The American Sterilized Food Co., Neal Building, Baltimore, Md., will buy a copper-vacuum tin-lined tank, fifty gallons capacity.

Tobacco Machinery.—Lea & Tate, High Point, N. C., want two strain licorice kettles, tobacco staves, casing machines, finishing mills, etc.

Well-boring.—See item under "pump" above.

Woodworking Machinery.—N. J. Tilghman & Sons, Palatka Fla., want a pony planer to dress two sides of shingle blocks 6x20 inches.

Wanted.—Prices on tin and lead foil in moderate and large quantities. Address H. C. C., care MANUFACTURERS' RECORD.

TRADE NOTES.

AMONG the equipment which the Steel Cable Engineering Co., East Boston, Mass., is placing on the market are twelve side-dump cars, new and in complete order; also a pair of double hoisting engines 6x10, with reverse motor, and one rotary engine geared to 1.

AN industry that is making rapid strides at Cincinnati, Ohio, is the manufacture of electrical machinery. A factor of importance in the up-building of this industry is the Triumph Electric Co., of that city. This company started business a few years ago, incorporating some original ideas in the policy directing its management. The aim was to produce machinery at the lowest cost consistent with high-grade construction. Economy of design, a limited number of sizes, a large product, skilled electricians and the selling of machines direct to users were found to be essentials that could be adopted. The result of this policy is shown in the extended popularity of the dynamos and motors made by this concern. A special feature of the company's business is the building of complete plants for commercial lighting, as well as the transmission of power. The number of installations of these plants is quite large, and the general satisfaction they are giving is an endorsement worth considering.

THE Ordway Construction Co., which was recently formed at Danville, Va., starts under favorable auspices to the building of a large patronage. Its authorized capital stock is \$100,000. The president of the company is James A. Ordway; Anthony Kocher is secretary and treasurer, and S. S. Ordway, superintendent and general manager. The manager of this company, with a large

force, has worked the past two years for the Riverside Cotton Mill Co., of Danville, building a large amount of masonry, consisting in part of a new dam about 1200 feet long across Dan river, building a masonry front to the old timber dam about 1000 feet long, two bulkheads, one ten and the other of twelve gates, a canal dam over 600 feet long, a large cotton and a flouring mill, elevator foundation, walling two sides of about 1000 feet of the Morotock Canal, besides a large amount of embankment walls, excavating in rock three wheel pits, tall-races, etc. The new company is well equipped with ability and experience to successfully carry out any class of construction

THE first triphase induction motor operated for commercial work from a central station in the United States was, it is said, at Concord, N. H. This plant was put in operation in September, 1893, by the Concord Land & Water Co., and was installed by the General Electric Co. Referring to the operation of the plant, the Concord Company says: "We now have over 400 horse power in motors and over 6000 incandescent lamps in operation from our two 250 kilowatt generators. It is four miles from our station, at the Sewalls Falls, where we have developed over 500 horsepower, to the centre of the city of Concord. The voltage at the city is 2200 on primaries and 110 on secondaries. The loss between the generators and transformers is 7½ per cent. on the heaviest load we have ever had. The generators were put into service, running continuously, with the exception of one and a half hours' shut down every Sunday P. M. for cleaning up, and have never given us one minute's trouble from any cause. We use the type F transformer, and with the single exception of having a primary coil open in one, these have proved satisfactory. The motors are sources of credit to the system. After having the vexation of commutators, sparking brushes, burned-out armatures, coils and starting boxes to contend with in our old 600 volt circuit, their absence with no corresponding annoyance attending is a relief that words cannot express. The motors start promptly with load, and their speed is almost absolute, varying less than 2 per cent. from load to running free. The motors and lights are run from the same transformers, and starting a motor does not affect the lights any more than starting lights which took the same amount of current would. We experience no difficulty in balancing our circuits, and a difference of loads between two sides of 25 per cent. is not noticeable in any way. We are operating heating and cooking apparatus, as well as laundry and tailors' irons, with great satisfaction to our patrons and selves."

TRADE LITERATURE.

SEVERAL little booklets published by Smith's Pattern Works, Akron, Ohio, explain the merits of this concern's products, and point out economical methods for the pattern shop and the foundry.

IMPROVEMENTS in the Blakeslee patent steam pumps are shown in a catalogue sent out by the Blakeslee Manufacturing Co., of Du Quoin, Ills. The various features of these pumps are fully explained, and the pamphlet gives some pertinent advice to pump users.

A CATALOGUE of steam engines and boilers has been issued by the Atlas Engine Works, Indianapolis, Ind. As to the merits of the Atlas products, the fact that there are 11,000 of these engines and a greater number of these boilers now in service is sufficient guarantee. They can be seen in operation in almost every town of importance in the country. The catalogue describes their details and illustrates the various styles.

THE products of the Van Auken Steam Specialty Co., Chicago, Ill., C. P. Monash, manager, are described and illustrated in a catalogue sent out by the company. An attractive list of goods is presented, embracing many ingenious devices tending towards economy, comfort and safety with the use of steam for any purpose. This company's sales for the past year were 50 per cent. greater than for the previous one. With its enlarged facilities and well-organized corps of experts it is in a position to promptly care for the growing popularity of its products.

SEVERAL small pamphlets have been issued by the Deane Steam Pump Co., of Holyoke, Mass., describing in condensed form a number of its leading machines and specialties. They include descriptions of the Deane specialties, Deane triple power pumps, Deane automatic receiver and Deane patent pumping apparatus. The idea of giving a brief but comprehensive description of these products separately enables those interested in such a class of machinery to study a particular machine without wading through a big catalogue. Copies of any of these pamphlets will be sent to those interested on application.

THE Acton steam and water specialties, made by John Acton, 79 Washington street, Brooklyn, N. Y., are shown in a neat little pamphlet. These specialties are widely used and are highly en-

dorsed. They include an automatic steam pump governor, which has been found a valuable appliance in controlling various pumps; the Acton regulating and reducing valve, which is employed for automatically reducing steam, water or gas pressure from the initial pressure to any desired pressure, resulting in great fuel economy; the Acton water works reducing valve, water-works relief valve, condensing-engine relief valve, noiseless back pressure valve, balance valve, and other ingenious devices.

A BOOK containing samples and descriptions of high-grade building, sheathing and insulating paper and roofing is sent out by the Standard Print Co., 2 Liberty street, New York city. Among the samples are the following: Sheathing, water and acid-proof; building paper that is alkali, acid and water-proof and of various weights; insulating paper widely used in lining cold-storage warehouses, refrigerator cars, abattoirs and other buildings where a normal temperature is required; Ruberoid roofing, which is especially recommended for chemical works, stables, etc., where exposed to fumes and gases, and is unaffected by heat or water. These products have stood the test of years, and possess many distinct qualities for their respective uses.

THE building of looms was begun in Lowell nearly seventy years ago, and has been continued without interruption ever since. Many inventions of proved value have been adopted, so that the "Lowell loom" has been a continued success, and their reputation on plain and twilled goods is well known. In designing these looms the greatest care has been exercised in making them of strong proportions for the class of work to be done, also in avoiding complicated motions, so that the stoppages from breakage are reduced to a minimum; the wisdom of this has been frequently testified to by manufacturers. The Lowell loom is running in every State where cotton manufacturing is carried on, and a large number have been exported. This loom in its present perfected style is described and illustrated in a catalogue published by the Lowell Machine Shop, Lowell, Mass.

IN the handling of materials for large engineering undertakings and manufacturing processes, as well as ore, coal, etc., from vessels, docks and mines, a revolution has been effected by modern machinery. This advancement is shown in an album issued by the Brown Hoisting & Conveying Machine Co., of Cleveland, Ohio. When it is desired to point out a great engineering project on which the most approved machinery is employed, preference is always given to the Chicago drainage canal. It is on this work that the Brown cantilever cranes attracted the attention of leading contractors and engineers. The low cost with which they handled materials, as well as the rapid work obtained, created a profound impression as to their mechanical excellence and practical success. The Brown patent cable tramway hoisting and conveying apparatus for the rapid handling of ore is shown in this pamphlet as in use at various railroad and transportation companies' docks. Much detailed information is given that cannot fail of being instructive as well as of interest to handlers of materials in bulk. The company has an office in New York city in the Havemeyer Building. W. A. Stadelman is in charge of this office.

Saturday and Sunday, April 6 and 7, Washington and Return via Pennsylvania Railroad.

April 6 and 7 the Pennsylvania Railroad Co. will sell at all its Baltimore ticket offices excursion tickets to Washington and return, good going and returning on all regular trains and valid for return until Monday, April 8, inclusive, at rate of \$1.25 for the round trip.

An Attractive Southern Property.

The advertiser has for sale one of the most attractive properties in the South. It comprises 1300 acres, 450 being in cultivation and 700 in virgin pine forest. It has exceptionally good railroad facilities. The land will produce large crops of corn, cotton, tobacco and all ordinary crops, and is particularly well-suited to trucking and fruit-growing. In the centre of the property there is a beautiful clear lake covering 150 acres, which abounds in fish and is a favorite haunt of ducks and other waterfowl. It is admirably adapted to boating, bathing, etc. The land surrounding the lake is entirely free from swamp and marsh, and affords beautiful sites for residences. The forest and fields abound in all kinds of game. As a hunting preserve this place cannot be surpassed. It could be made one of the most delightful homes in the South. For a fine resort hotel no better place can be found in America. The locality is pre-eminently healthy. Price \$10,000. For particulars address B. S. C., care MANUFACTURERS' RECORD. †

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PROPOSAL FOR INDIAN SUPPLIES AND TRANSPORTATION —Department of the Interior, Office of Indian Affairs, Washington, D. C., April 2, 1895. Sealed proposals, indorsed "Proposals for Beef (beef must be submitted in separate envelopes), Flour, or Transportation, etc., as the case may be, and directed to the Commissioner of Indian Affairs, corner State and Twelfth streets, Chicago, Ill., will be received until 1 o'clock P. M. of Tuesday, April 30, 1895, for furnishing for the Indian Service. Beef, Flour, Bacon, and other articles of subsistence; also for agricultural implements, wagons, harness, hardware, medical supplies, and a long list of miscellaneous articles; also bids for the transportation of such of the articles, goods, and supplies as may not be contracted for to be delivered at the agencies. Sealed proposals, indorsed "Proposals for Coffee, Sugar, Clothing, etc., as the case may be, and directed to the Commissioner of Indian Affairs, Nos. 77 and 79 Wooster street, New York City, will be received until 1 o'clock P. M. of Tuesday, May 21, 1895, for furnishing for the Indian Service, coffee, sugar, tea, rice, beans, baking powder, soap, groceries, blankets, woolen and cotton goods, clothing, notions, hats and caps, boots and shoes, and crockery. Bids must be made out on Government blanks. Schedules giving all necessary information for bidders will be furnished upon application to the Indian Office in Washington, Nos. 77 and 79 Wooster street, New York City, or corner State and Twelfth Streets, Chicago, Ill.; the Commissaries of Subsistence, U. S. A., at Cheyenne, Leavenworth, Omaha, St. Louis, St. Paul, and San Francisco; the postmasters at Sioux City, Yankton, Arkansas City, Caldwell, Topeka, Wichita, and Tucson. Bids will be opened at the hour and days above stated, and bidders are invited to be present at the opening. Certified checks.—All bids must be accompanied by certified checks or drafts upon some United States Depository, or solvent national bank, for at least 5 per cent. of the amount of the proposal.	
D. M. BROWNING, Commissioner.	

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Caldwell Land & Lumber Co. 26	Canton Steel Roofing Co. 31				
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Camden Steel Roofing & Cor. Co. 31	Cardwell Machine Co. 29				
Cameron, A. S., Steam Pump Wks. 36	Carrollton Gas Co. 26				
Cameron & Barkley Co. 20, 24	Carpenter's Jno. S., Dairy Sup. House. 8				
Canby, Edward T. 25	Carver Cotton Gin Co. 29				
Canton Steel Roofing Co. 31	Central Manufacturing Co. 26				
Capital Stained Glass Works. 30	Central Manufacturing Co. 23				
Cardwell Machine Co. 29	Chadwick, Wm. A., & Co. 6				
Carnell, George. 38	Chadwick, Wm. A., & Co. 6				
Carolina Buff & Brown Stone Co. 26	Chadwick, Wm. A., & Co. 6				
Caroline Iron Works. 20	Chadwick, Wm. A., & Co. 6				
Carter's Jno. S., Dairy Sup. House. 8	Chadwick, Wm. A., & Co. 6				
Carver Cotton Gin Co. 29	Chadwick, Wm. A., & Co. 6				
Central Manufacturing Co. 26	Chadwick, Wm. A., & Co. 6				
Chapman, Wm. A., & Co. 6	Chadwick, Wm. A., & Co. 6				
Chapman Valve Mfg. Co. 38	Chadwick, Wm. A., & Co. 6				
Charlotte Machine Co. 29	Chadwick, Wm. A., & Co. 6				
Charlton & Pruitt. 6	Chadwick, Wm. A., & Co. 6				
Chattanooga Fdy. & Pipe Works. 35	Chadwick, Wm. A., & Co. 6				
Chattanooga Paint Co. 31	Chadwick, Wm. A., & Co. 6				
Chattanooga Steel Roofing Co. 30	Chadwick, Wm. A., & Co. 6				
Chester Steel Castings Co. 13	Chadwick, Wm. A., & Co. 6				
Chicago Scale Co. 9	Chadwick, Wm. A., & Co. 6				
Child, Chas. T. 6	Chadwick, Wm. A., & Co. 6				
Chrome Steel Works. 13	Chadwick, Wm. A., & Co. 6				
Church, Isaac. 9	Chadwick, Wm. A., & Co. 6				
Cincinnati, Hamilton & D. R. R. *	Chadwick, Wm. A., & Co. 6				
Cincinnati Machinery Co. 24	Chadwick, Wm. A., & Co. 6				
F	Chadwick, Wm. A., & Co. 6				
Farquhar, A. B., Co., Ltd. 35	Fidelity & Deposit Co. 23				
Fay, J. A., & Egan Co. 32	Fidelity Tool Co. 12				
Fay Manilla Roofing Co. 30	Fife, A. E., Mfg. Co. 31				
Fernandina, Fla. 40	Fitchburg Steam Engine Co. 14				
Fernandina Oil & Creosote Works. 27	Fleming Mfg. Co. 16				
Fernoline Chemical Works. 26	Fletcher & Thomas. 38				
Forster Pulley Works. *	Foster & Briggs. 24				
Fort Worth Iron Works Co. 16	Foster Machine Co. 28				
Fosdick & Plucker Mch. Tool Co. 26	Foster Telephone Co. *				
Foster Engineering Co. 37	Forsyth, S. C., Machine Co. 14				
Foster Machine Co. 23	Forster Pulley Works. *				
Fowler, W. E. 22	Forster Pulley Works. *				
Freese, E. M., & Co. 43	Forster Pulley Works. *				
French, Saml. H., & Co. 38	Forster Pulley Works. *				
Frikk Co. 14	Forster Pulley Works. *				
Frisbee Lucop Mill Co. 18	Frontier Iron Works. 34				
Gandy Belting Co. 11	Gainesville Iron Works. 18				
Gascoyne, Dr. W. J. 6	Gandy Belting Co. 11				
Gas Engine & Power Co. 38	Gandy Belting Co. 11				
Gates Iron Works. 20	Gandy Belting Co. 11				
General Electric Co. 42	Gandy Belting Co. 11				
General Fire Extinguisher Co. 19	Gandy Belting Co. 11				
Georgia Immigration and Investment Bureau. 40	Gandy Belting Co. 11				
Georgia State Co. 31	Gandy Belting Co. 11				
Gilchrist, Peter S. 6	Gandy Belting Co. 11				
Gilmongan Pipe & Foundry Co. 35	Gandy Belting Co. 11				
Glascock & Co. 9	Gandy Belting Co. 11				
Globe Gas Engine Co. 16	Gandy Belting Co. 11				
Golden Machinery Depot. 24	Gandy Belting Co. 11				
Golden's Foundry & Machine Co. 10	Gandy Belting Co. 11				
Gordon Hollow Blast Grate Co. 45	Gandy Belting Co. 11				
Gowdrey, J. A., & Son. 28	Gandy Belting Co. 11				
Graham, J. S., & Co. 34	Gandy Belting Co. 11				
Graves Elevator Co. 34	Gandy Belting Co. 11				
Graves & Kusman. 35	Gandy Belting Co. 11				
Greensboro, N. C. 40	Gandy Belting Co. 11				
Groetzinger, A., & Sons. 18	Gandy Belting Co. 11				
Guibert, John C. N. 6	Gandy Belting Co. 11				
Guild & White. 6	Gandy Belting Co. 11				
Gunning & Stewart Co. 28	Gandy Belting Co. 11				
G	Haden, C. J. 40				
Harden's Niagara Stm. Pump Wks. 37	Harden's Niagara Stm. Pump Wks. 37				
Harrington & King Perforat'g Co					